

MANUFACTURERS' RECORD

A WEEKLY REVIEW OF THE IRON, STEEL, METAL & HARDWARE TRADES.

AND A MANUFACTURING AND TEXTILE PAPER, DEVOTED TO THE UPBUILDING OF SOUTHERN MANUFACTURES AND THE DEVELOPMENT OF THE MATERIAL RESOURCES OF THE SOUTH.

VOL. 6. No. 18.
WEEKLY.

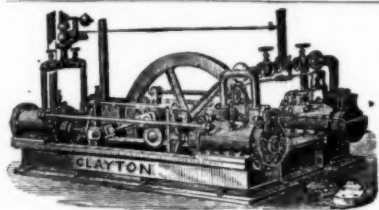
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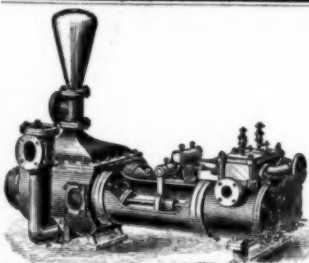
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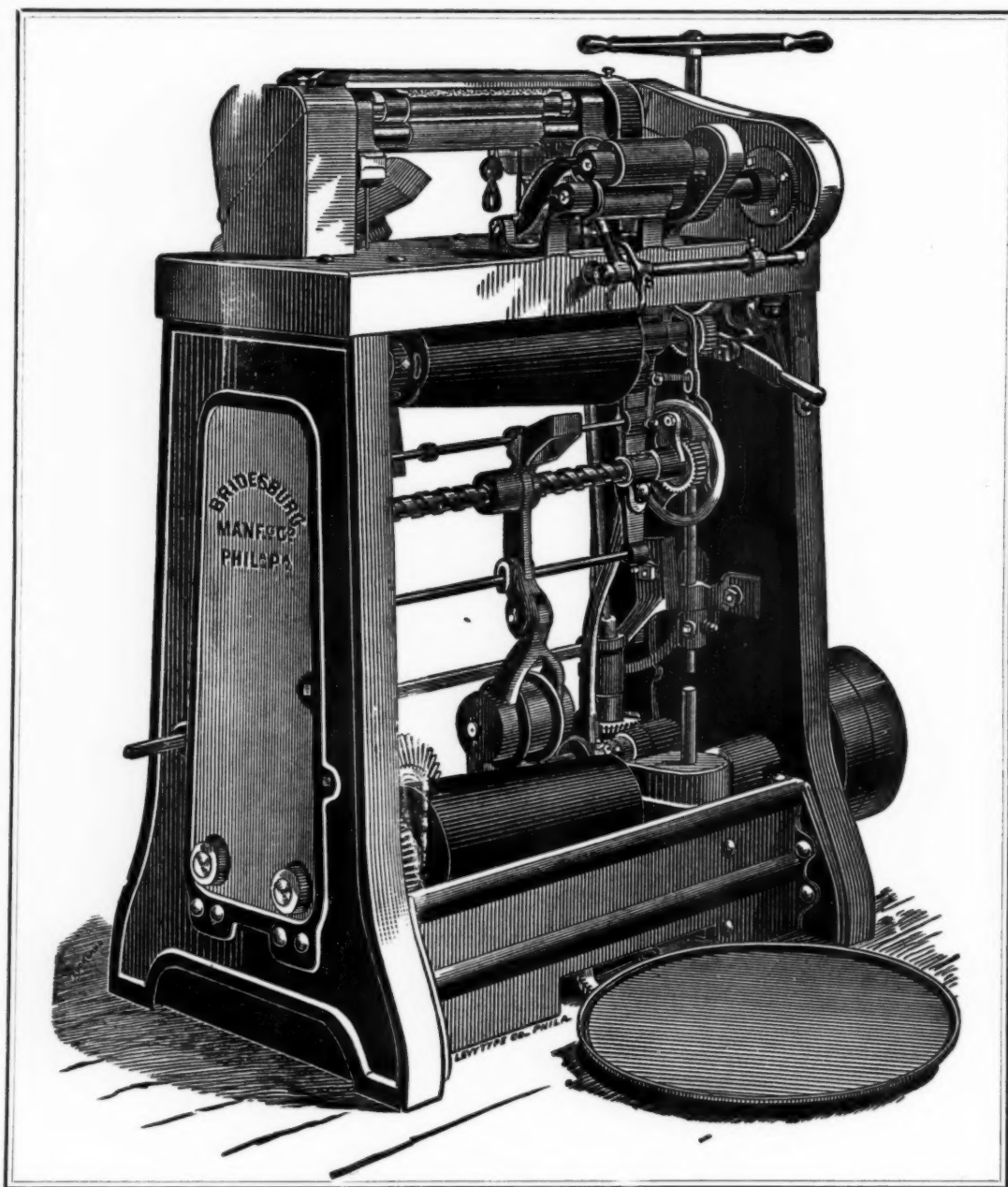
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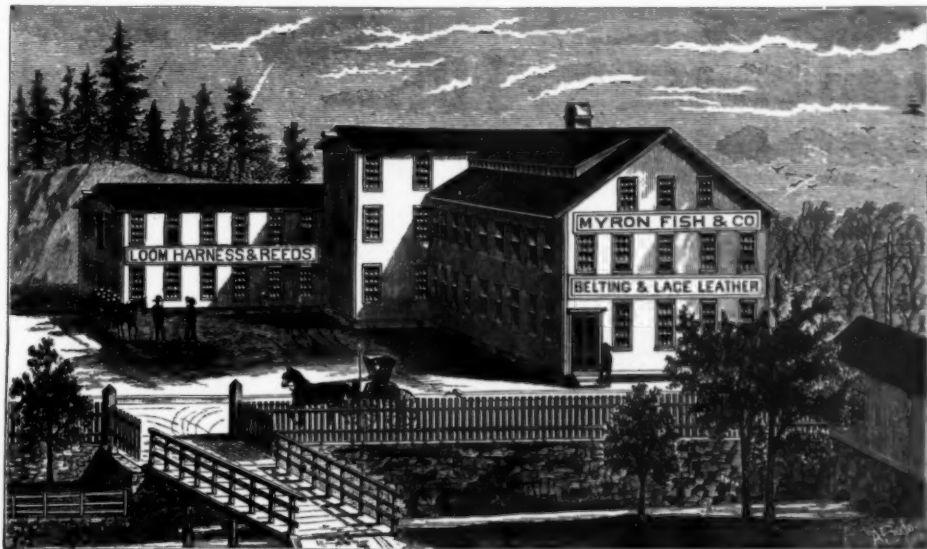
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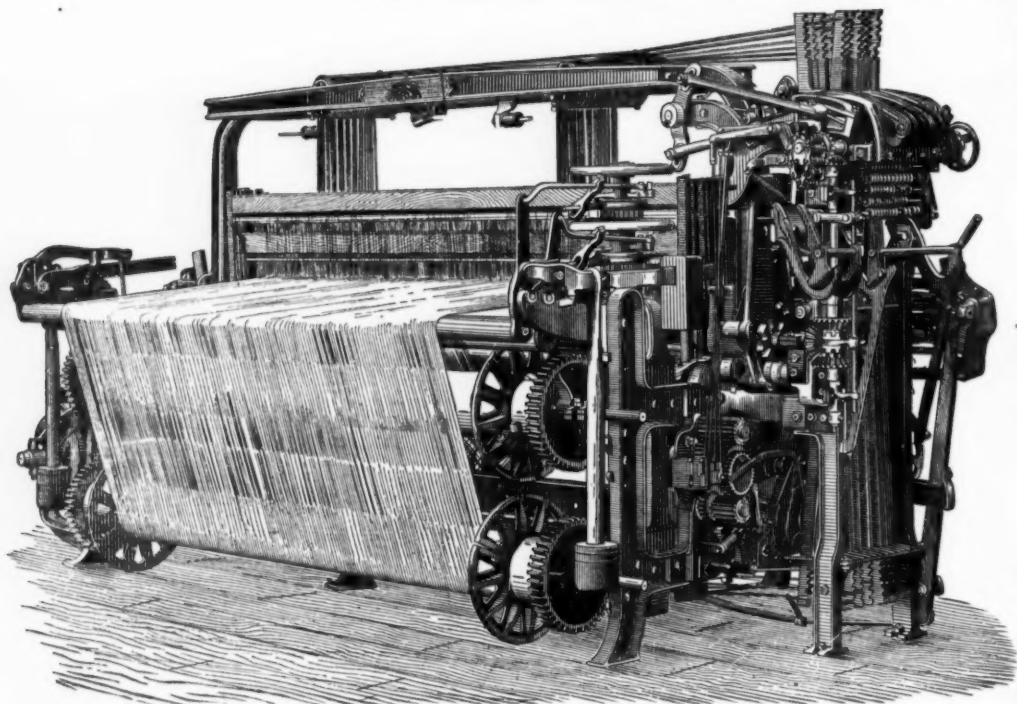
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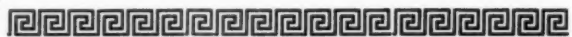
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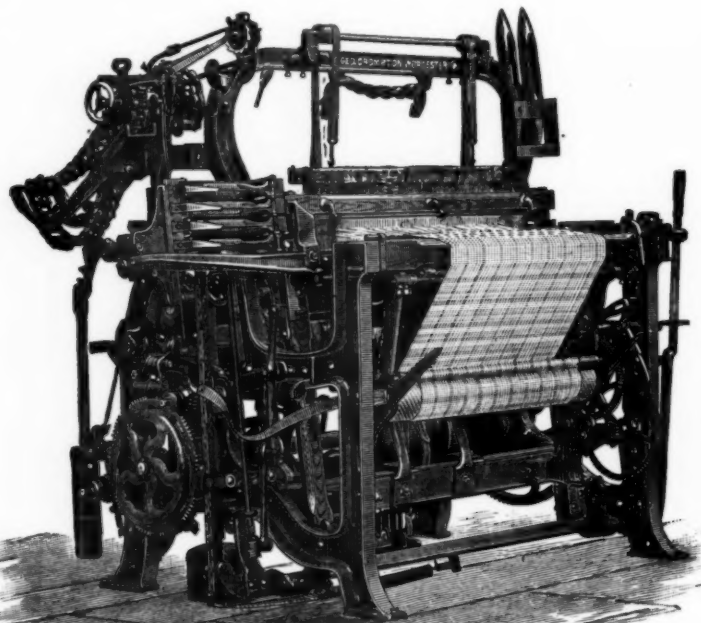
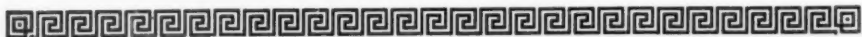
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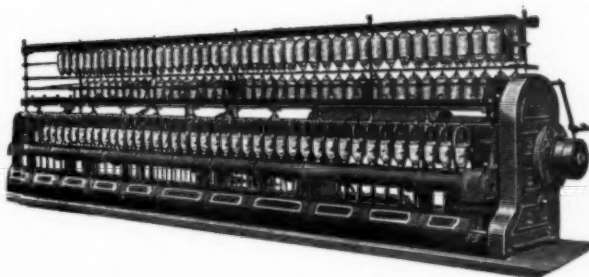
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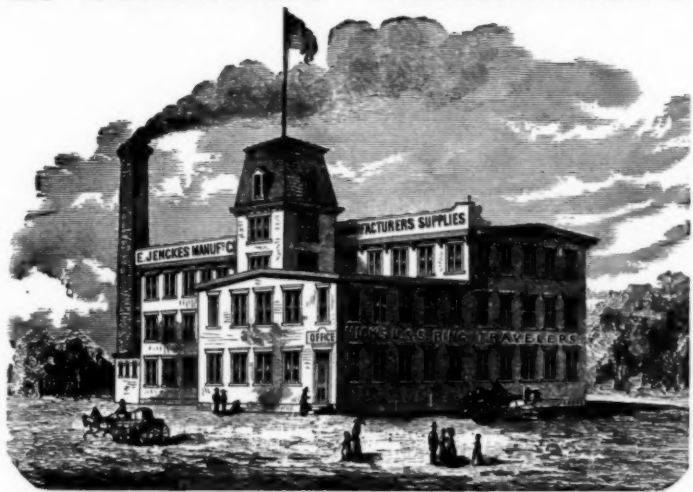
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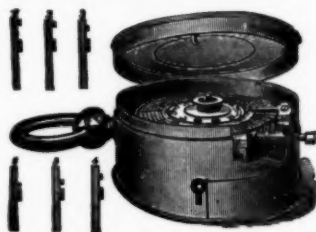
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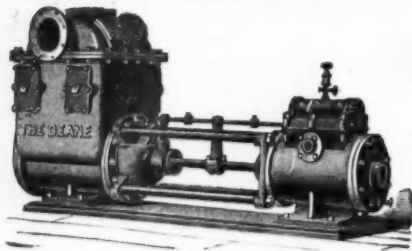
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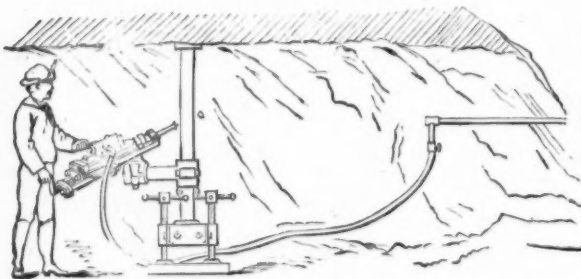
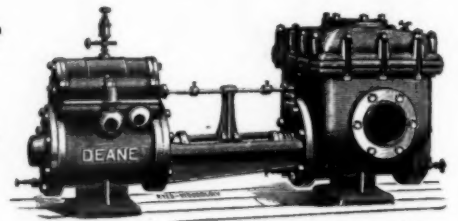
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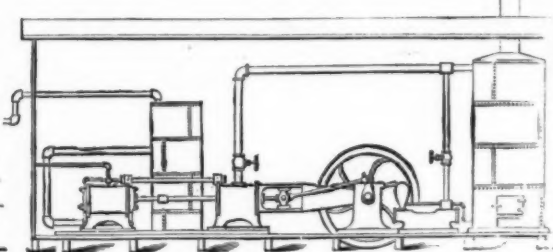
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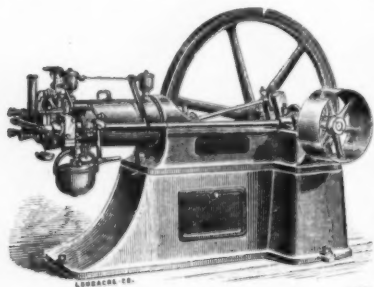
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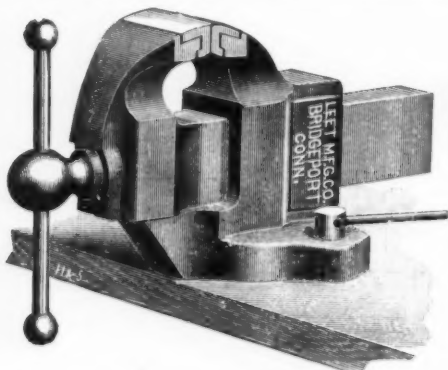
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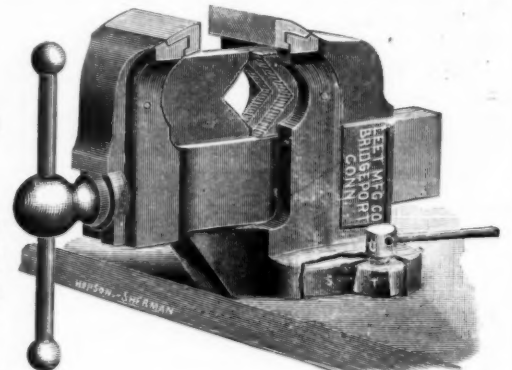


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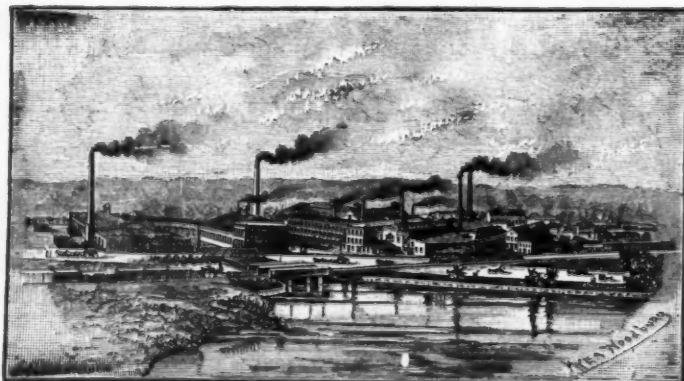
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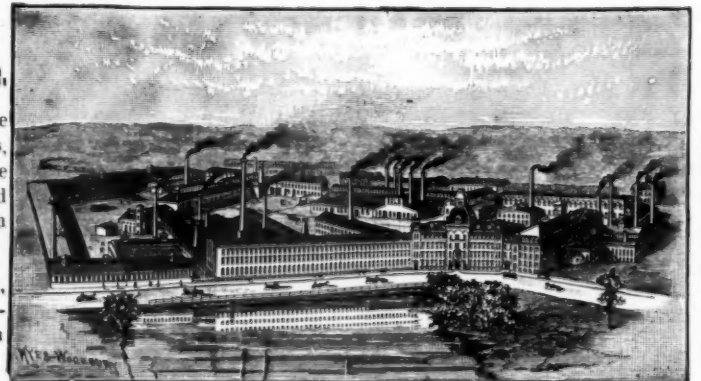
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BALTIMORE, DECEMBER 13, 1884.

A BOOK entitled "The New South," by Col. M. B. Hillyard, of New Orleans, whose ability to do impartial justice to that section of the United States is beyond question, is in course of publication in Baltimore by Messrs. Bigsby & Edmonds, of the MANUFACTURERS' RECORD. The book will treat of the special resources of each State, its soil, climate, mineral wealth, industries, &c. It is a work that has long been needed.—Baltimore Sun.

CORRESPONDENCE relating to the manufacturing, mining, lumbering and all other material interests of the Southern States is solicited. We invite those interested in the development of the South to make free use of our columns. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the MANUFACTURERS' RECORD offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested. We will take great pleasure at all times in telling what has already been accomplished in the South, and showing up the opportunities of doing still more,—so if you desire to attract immigration or capital, or if you know of an opening for profitable investment in manufacturing, mining or kindred pursuits, write us an account of it. It will be published free of cost.

Our readers will confer a favor upon our advertisers and upon us, as well as benefit themselves, if, whenever they write to anyone advertising in this paper, if it is only for a catalogue, they mention that "your advertisement was seen in the BALTIMORE MANUFACTURERS' RECORD." A careful compliance with this request will be much appreciated.

Free Raw Materials.

The suggestion of Secretary McCullough regarding the removal of duties on free raw material is in keeping with the efforts of those who, while desiring protection for their own business, are seeking to gain their raw material free of duty, thus unwilling to permit others to enjoy the benefits of that protection which they feel is essential to their success. To make such raw materials as iron ore, coal, &c., free of duty, would be a very severe blow directly at the industrial interests of the South,—a section which, in our opinion, needs a protective tariff more than any other part of the country. The South is rich in raw material;—her mines of iron ore and coal are almost, if not quite, inexhaustible, and she is making good progress in utilizing this great natural wealth, but if she is denied the benefit of a protective tariff, her vast resources must remain undeveloped.

It is a mistake to suppose that the advantages possessed by the South for iron making are so great that she needs no protection, or to imagine that because Southern furnaces have marketed about 100,000 tons of pig iron in the North this year, that they can successfully and permanently compete in the North with Northern furnaces. The South, or at least some portion of it, can undoubtedly make pig iron at a very low price, but not at such a price as to make it very profitable to ship the iron North at an expense of \$4@5 a ton. We regret to see Southern pig iron seeking a market in the North, for there is but little profit in the business, and how much better it would be if there were sufficient diversified industries in the South to consume the pig iron made there. Then there would be good profit to the furnaces, for the \$4 or \$5 a ton now paid as freight would be saved, or at least most of it, and the factories and foundries using pig iron as a raw material would be able to produce at a very low cost the machinery, agricultural implements, nails, &c., needed in the South. The building up of these industries can all be gradually accomplished under a wise protective tariff, covering raw materials as our tariff now does; but, if the duty on these is abolished and foreign ore permitted to come in free, the South will find itself very seriously handicapped in the development of its great resources.

THE proposed commercial treaty with Spain does not promise to meet with a very hearty approval in this country, and it is possible that the advantages to be secured are by no means commensurate with the value of what it is proposed to concede to Spain. It would certainly be disastrous to the sugar interests of Louisiana, and would probably definitely settle the future entire dependence of this country upon the West Indies for sugar. It is to be hoped that this treaty may not be confirmed, at least in its present shape.

Exemption vs. Protection.

The inconsistency of the papers, that are always vigorously opposing a protective tariff and at the same time favoring the exemption of manufactures from state taxation, is excellently illustrated in the case of the Charleston, News and Courier. As our readers know, that paper is an uncompromising opponent of protection, but at the present time it is doing its best to show the advantages to South Carolina of exempting manufactures from taxes, which is really nothing more nor less than protection. The Richmond Dispatch, undertakes to show how the arguments of the News and Courier can be applied with equal force to a protective tariff, and says:

"We cannot imagine how our Charleston contemporary can argue as it does without perceiving that all it says applies as well to factories established in consequence of the existence of a protective tariff as to factories established in consequence of the existence of an exemption law. What, for example, is the following paragraph but an argument for protection? We quote:

"The increase in values of products, which is due to manufacturing must be taken to be primarily beneficial to the whole state, because the money which is paid out in wages and divided in profits, flows to every part of the commonwealth. It cannot be confined to any one county. When a bale of cotton, worth \$45, is converted into yarns and cloth and sold at \$90, the State gains \$45 by the transaction, less such amount of money as may be sent out of the State for the purchase of chemicals and other material."

Might not Mr. Randall have written that paragraph? Again:

"What do the people, as a whole, pay for this benefit [protection?] What does it cost them?

"As we understand it, the cost to them is nothing, or less than nothing. That which is not in existence cannot be taxed. Factories which have not been built cannot be made to contribute to the public revenue. When factories are erected in consequence of exemption from taxation, [in consequence of protection,] the State is no worse off, as regards taxes, than it was before their erection. It is, in truth, better off. The land on which a factory is built continues to be taxed, and, as that land increases in value by reason of the erection of the factory, the amount of the tax becomes larger and larger, until the State receives several times as much in taxes as it would have received if no factory had been built."

Again:

"As a village grows up around the factory, the value of the land increases, and in the course of time the land owned by the company will be assessed at \$3,000 or \$5,000, instead of \$1,000. The increase in the amount of the tax is a clear gain to the State and the county, and this gain is exclusive of the proportionate gain in the amount of tax paid upon all the land in the village and far into the surrounding country."

That reads as if it were one of Pig-Iron Kelley's paragraphs. Once more we quote:

"There is, as we have endeavored to show, no loss to the State by the exemption of manufactures [by a protective tariff], but, on the contrary, there is a large and growing gain. Charleston loses, for the time being, the city tax of 2 per cent., which would be levied upon the factories, if they were not exempt from taxation—and were, in that event, in existence. But there is no grumbling here. The Charleston public understand perfectly well that the real gain is far more than the apparent loss, and that there is no better way to give solid prosperity to

the State than by encouraging the diversification of industry by local manufactures."

Judge Kelley would say:

"There is no loss to the people by protection, but a large and growing gain. Charleston pays the tariff tax, and so loses that much, which she would not have to pay, but for a protective tariff. But there is no grumbling. The Charleston public understand perfectly well that the real gain from protection is far more than the apparent loss, and that there is no better way to give solid prosperity to the State than by encouraging [or protecting] the diversification of industry by local manufactures?"

The Effect of Manufactures.

We have repeatedly shown the value of manufactures to any section of the country, and, as bearing on the same subject, the Charleston News and Courier, in writing of the Charleston Cotton Mill, says: "Property has increased in value in all that quarter of the city where the factory is situated, which increase is the direct result of the erection and operation of the factory itself. The increase in many places has been as high as 100 per cent., and it is not too much to say that the entire cost of the factory to the city has been more than compensated by this one item alone. The same remark applies to similar enterprises in other counties in the State. The lands around the Piedmont and Pelzer factories, which could have been bought at one or two dollars an acre before those factories were built, could not now be bought for one hundred dollars an acre. The increase in values of all kinds around these factories and the Pacolet and Clifton factories, in Spartanburg county, and others in other parts of the State, amounts to millions of dollars."

A WESTERN mining prospector—Winkle by name—has lately been hunting around the mountains near the village of Spring Place, Ga., for silver, traditions having pointed out that region as a place where the Indians once mined silver. After a few weeks work Winkle turned up with a carpet bag full of specimens of ore, and after considerable efforts, succeeded in getting six gentlemen to put in a small amount of money to help him prosecute his labors. One of these gentlemen backed out when a second call for money came, and sold his interest to Mr. Walter Anderson, of Spring Place, for \$300. It is now said that Mr. Anderson has just refused \$30,000 for his one-sixth interest in the mine. Winkle says the mine is marvellously rich, and it is claimed that some of his specimens assayed at the rate of \$2,000 to the ton.

PROPOSALS for the illumination of the city of Rio de Janeiro by gas will be received up to three P. M., of February 28th, 1885, at the Brazilian Legation, at Washington, D. C., and at the Brazilian Consulate General in New York. Specifications and general conditions will be furnished on application at the same places.

The Mason Cotton Picker.

The Mason Cotton Picker, of which we have already had considerable to say, promises to fully meet the high expectations of those who have looked upon it as destined to revolutionize the cotton business of the South. The managers of the New Orleans World's Fair appointed a committee to examine the Mason Picker and to thoroughly test it in actual work. This has been done and the committee in their report say:

"Frost had more than once fallen on the upright stalks; the bolls were all open, with the cotton hanging to them loosely and limp. The limbs of the stalks and leaves were exceedingly brittle and crisp, yet as the machine advanced we only missed the lint—stalks, limbs and leaves remaining intact. Of course the lint, in being drawn from the bolls, came in contact with and adhered to parts of leaves almost pulverized. The shafts of the locomotive were attached to one side of the locomotive, so that the mule moved between the rows while the centre of the machine passed over the apex of the row.

Of course the return trip threw the mule between the first and second row, and the machinery passed over the same row twice. After the return trip we noticed no change in the stock, etc., but the lint was nearly all gone, safely stored in pendant bags. The result was wonderful—almost incredible to any but an eye witness.

It could have scarcely been subjected to trial under more unfavorable circumstances—those above mentioned and others that might be enumerated—and yet at each passage over the row about fifty per cent. of the cotton there standing was bagged. Its almost intelligent selection of the open cotton, to the exclusion of almost everything else, was the most remarkable as well as gratifying feature. Those who have seen it work in a field with luxuriant weed, and on the first opening of the cotton, testify to this wonderful result. The seeded lint alone was gathered, while the blooms, leaves and immature bolls were left uninjured.

The committee say further: He showed us several machines of various sizes already prepared for work and pointed out several of his contemplated improvements which none but a skilled machinist could appreciate. But the simplicity of true genius characterizes all its forms. The efficient parts are all made on the same model and are all interchangeably adjustable. And one part can promptly be replaced in the machine without derangement to the other parts. As it must necessarily fall into unskilful hands on the farm this is vital to its success. The operator has only to retain his seat on the locomotive and drive his mule aright and the machinery itself takes care of the cotton. The cotton gathered in this experimental trip of the machine was immediately transferred to the Mason Cylinder Gin and promptly converted into lint ready for packing. Mr. Mason promises as an adjunct to his machine a cotton cleaner, which will remove all the light debris sometimes adhering to the cotton.

Of this cylinder gin we are not called on to report, but as the universal verdict is in its favor in preference to the saw gin we must be pardoned for saying, from what we saw of its efficiency, that it has these decided advantages over a saw gin of equal size:

1. It requires less power to work it.
2. It turns out more lint.
3. Its cost of construction is less.
4. The lint turned out has no gin cut even in long staple highlands.
5. It is a perfectly safe machine for the operator and manipulator.

This last advantage is inestimable. The same device for drawing the cotton over the cylinders by these mysterious, but ever

present teeth, is its distinguishing feature, and while irresistible to the cotton, is perfectly harmless to the operator. Nails, etc., thrown into the cotton while feeding are thrown out with the seed, neither the nail nor the machine being the worse for the passing through."

"THAT South Carolina Railroad commission" said a railroad man to an Observer reporter yesterday, "is not only causing the railroads under its jurisdiction to lose money, but it is keeping other roads from being built in that State. When it undertakes to regulate passenger and freight tariffs, it is doing something that it knows nothing about. The result of its actions is ruination for all the railroad interests of South Carolina. I know of one projected railroad extension into that State that is being held back simply on account of that commission."—Charlotte Observer.

We can name as we have previously done, one road that would be built in South Carolina if the commission was abolished, that would cost probably \$5,000,000 to \$6,000,000. The money was ready when the law authorizing the commission was passed, but the projectors of this road determined not to throw away their money, for it would be a waste of money to those who advanced it at least, to build a railroad while the South Carolina railroad commission is in existence, and so that much money in one case alone has been kept out the state. How much more it would be hard to say. It is greatly to be regretted that the Southern States, or that any of them should pursue a policy so destructive to their best interests as this railroad commission business. It is a great mistake, and one that is working serious injury not only to the States which have commissions, but also to the others, as capitalists are afraid to put their money into Southern roads, and thus the improvement of old roads and the building of new ones is seriously hindered.

Everybody should buy a copy of "THE NEW SOUTH." It will be worth many times its cost.

A BILL has been introduced in the General Assembly of Alabama to establish an Industrial and Immigration Bureau, and we are glad to see that many of the leading papers of that State are strongly in favor of it. Alabama, like the other Southern States, needs immigration, and one of the best means of helping to attract settlers to the State is through the work of an Immigration Bureau. The small expense that this would entail upon the State would, we feel sure, be many times repaid by the good accomplished in attracting capital and immigration.

THE Grocer and Canner, of this city, a weekly journal devoted to the interests of the oyster, canned goods and grocer trades, issued last week a special edition of several thousand extra copies for distribution in this country and Canada. The Grocer is a neatly printed paper of value to the very large interests that it represents.

ELSEWHERE will be found the prospectus of a book on the South shortly to be issued by the publishers of the MANUFACTURERS' RECORD. Its aim and scope are fully set forth in the advertisement, of which we ask a careful reading. The South is now a point of attraction for the whole world. Capitalists of our own and other lands are looking for investments in its bed of coal, its exhaustless mines of iron ore, its vast forests of timber, in the manufacture of its cotton, in the utilization of the water power afforded by its countless streams. Mechanics are turning to the South for employment in its promising and prosperous mills and factories and furnaces and machine shops. Farmers are being attracted by its fertile soils, its freedom from rigorous winters, the multiplicity of crops of which its lands are capable.

It is for these that "THE NEW SOUTH" is published, as well as for all others who desire information bearing on the resources and attractions of the Southern States. It is a book that should be read by every man in the South and by every one who has any idea of ever locating there.

MESSRS. C. B. Cottrell & Sons, New York, the well known manufacturers of printing presses, have issued a new catalogue illustrating and describing their various styles of presses. The Cottrell presses are probably as near perfection as it is possible to make machinery. They are supplied with the very latest and best improvements, some of which are patents of Mr. C. B. Cottrell, and hence can be found on no other make of presses. This catalogue shows the workings of the new front delivery, lately patented by Mr. Cottrell, which has given such excellent satisfaction. Messrs. Cottrell & Sons manufacture all kinds of cylinder presses from the high priced lithographic power press to the patent air-spring country press.

Every man in the South should have a copy of "THE NEW SOUTH." The price is low. See Prospectus published elsewhere.

List of Patents

The following Patents were granted to citizens of the Southern States, bearing date Dec. 2, 1884. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C. Advice free.

Bliven, Charles, Norfolk, Va. Pile driver.....	308,738
Boughton, W. G., Frostburg, Md. Wagon jack.....	308,824
Harvey, W. B., Memphis, Tenn. Polarized telegraphic relay.....	308,610
Haven, W. S., Shreveport, La. Combined gang and sub-soil plow.....	308,667
Jaquith, Gilman, Maysville, Ky. Driving belt.....	308,674
Lumsdon, Thos., Marion, Va. Vehicle spring.....	308,846
McAlpin, D. M., Savannah, Ga. Plow.....	308,682
Morrison, W. S., Ft. Worth, Texas. Pipe wrench.....	308,786
Munger, R. S., Mexia, Texas. Mechanism for handling lint cotton.....	308,787
Munger, R. S., Mexia, Texas. Apparatus for handling seed cotton.....	308,788
Munger, R. S., Mexia, Texas. Cotton or other press.....	308,789
Munger, R. S., Mexia, Texas. Apparatus for handling seed cotton.....	308,790
Nicholson, C. W., Assamooick, Va. Peanut stripper.....	308,690
Nusbaum, H. P., Mount Airy, Md. Thill attachment for harness.....	308,849
Owen, L. B., Cedartown, Ga. Car coupling.....	308,852
Sinsz, Phillip, Baltimore, Md. Glass cutter guide.....	308,709
Vanduzen, Ezra W., Newport, Ky. Skimmer for boiler cleaners.....	308,644
White, J. F., and C. W. Taylor, Gallatin, Tenn. Sewing machine shuttle.....	308,720
Williams, F. F., Salado, Texas. Churn power.....	308,720

Southern Manufactures Needed.

[Lynchburg Virginian.]

We quite agree with the BALTIMORE MANUFACTURERS' RECORD that, instead of seeking a market for Southern pig iron in the North, it should be manufactured into all the implements for which it is essential in our own section. It is something, to be sure, to be able to produce the iron itself in the South, and to undersell the North in her own chosen markets, since that is a great advance upon ante-bellum times, and a wonderful triumph for the industrial interests of the South,—a section that, as we have always maintained is more richly endowed by nature than any other in the country. As long ago as 1849, Horace Greeley, who was then in Congress, stated in a conversation with this writer that "no State in the Union possessed such resources as Virginia," and added that "she ought to be largely a manufacturing centre, and the leading State of the Union." And so, for the last thirty years, in the columns of this paper, we have been urging Virginians to turn their attention more largely to this important agency for the development of the natural wealth of their State.

The MANUFACTURERS' RECORD says:

"While we are glad to see Southern iron makers finding a market for the product of their furnaces, yet it is to be regretted that so large an amount of Southern iron must seek a consuming market elsewhere than near where it is to be made. It would be vastly to the benefit of the South and all its industries if there were sufficient diversified industries in that section to consume the iron manufactured there, instead of its being shipped North at an expense of \$4 or \$5 a ton, and there manufactured and reshipped to the South in the shape of stoves, machinery, agricultural implements," &c.

The RECORD hits the nail squarely on the head. For many years, the Southern people were content to grow cotton for Northern and European manufacturers; pay the expense of transportation to distant markets; the cost of manufacturing it into useful and necessary fabrics; and the expense of transportation back to them again! That was a short-sighted policy to say the least, and was calculated to make us, throughout all time, mere hewers of wood and drawers of water, to the people of the other section—dependent upon them for the very clothing that we wore. But the South is getting bravely over that folly, and is now manufacturing her own goods, while reaping the double profit that accrues to producers and manufacturers, and underselling the North in fabrics of cotton. And why may it not be so with all the products of iron?

We have shown that we can produce pig iron, pay \$4 or \$5 a ton to transport it North, and then undersell the iron-mongers there, in their own markets. But how much better it would be for us if, in addition to the profit of converting the crude ore into iron, we should employ the skilled labor required to manufacture stoves, and the thousand other articles into which iron is wrought. The time is coming, we doubt not, when this will be done; and the sooner that result is accomplished, the better it will be.

Read the Prospectus of "THE NEW SOUTH," in the advertising columns.

BRADSTREET'S estimates the cotton crop at only 5,418,360 bales, or nearly a half million bales less than the estimates of other good crop authorities.

THE total shipments of Southern pig iron to the North during 1884 are now placed at 100,000 tons, instead of 76,000 tons as estimated by Bradstreet's last week.

New Double Cut-off Saw.

The illustration on this page represents a new machine just designed by The Egan Co., of Cincinnati, Ohio, for use in factories where it is required to cut-off to exact lengths a large number of pieces ranging from 6 feet 6 inches down to 4 inches in length, and as the fence moves back and forth in grooves planed exactly at right angles to the saw mandrel, it does its work in a perfect manner.

The frame carries two pedestals, on each of which, is a mandrel carrying two saws.

One of these pedestals is movable and from the other by means of a large hand wheel at the front of the machine and a rack and pinion underneath the machine.

The driving pulleys of the movable mandrel slide back and forth on a feather on the shaft as the pedestal is moved.

An adjustable fence is set in grooves planed in the back of the table. The table may be raised and lowered for different thicknesses, and when placed in any desired position, may be instantly clamped by means of four clamped screws. When the inner saws are being used to cut short pieces, the outer saws may be utilized for ripping, mitering, etc., three men thus working the machine at the same time and without interfering with

The South as a Field for Investment.

There is no better field for investment now than the South. In every Southern State there is great need of money to begin new enterprises or to carry on those already established. Farmers want money, business men want money, and those who are preparing to open up mines or to start manufacturing want money. They are willing to pay a good interest for it, and they can afford to pay it. It is a mistake to suppose that they cannot furnish good security.

The South is rich in resources. Her lands produce abundantly; her forests are valuable now, and are becoming more valuable every year, and her mines of iron and coal are equal to any in the world.

It needs only a glance at the assessment rolls of the different Southern States to convince any one that the South is making rapid strides towards wealth. In 1879 the assessed value of property in Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Kentucky, Tennessee and Arkansas was \$2,184,000,000. The assessed value this year was \$2,825,000,000—an increase in five years of \$641,000,000. This increase is not attributable to inflated values, but to accumulated wealth.

institutions of Connecticut, Massachusetts and other Northern States, can now be done for the South. The security in the South is just as good as it ever was in the West, and Southern lands are capable of being made just as profitable.

During the coming winter the Northern people will get a better idea of the South and her resources than they ever had before. At the New Orleans Exposition they will see evidences of wealth that will surprise them. Their keen business sense will see opportunities for investing their money in the South that, it is hoped, they will not be slow to take advantage of.—Savannah News.

Literary Notes.

ATALA. By Chateaubriand. Translated by James Spence Harry. From Firmin Didot's edition of the Viscount's Works. Illustrated by Gustave Dore. Introduction by Edward J. Harling. In one 4 to volume.

Francois Rene, Viscount de Chateaubriand, was the most brilliant representative of the reaction against the ideas of the French Revolution, and the most conspicuous figure in French literature during the First Empire. "Atala, or the Loves of Two Savages," appeared in 1801 and immediately

Tennessee Mountains," and in this volume, which has just been issued, he fully meets the high expectations of those who regard him as one of the coming writers of the South. The central scene of "Where the Battle was Fought," is an old Tennessee battle field where an ex-confederate general resides with his daughter. "The reader," it is said by a reviewer, "will find plot and counter-plot, intrigue and mystery enough to satisfy any lover of the sensational, but the intellectual reader will find his attention chiefly engaged in studying the old general and his daughter, the heiress, the stern federal soldier and the scheming speculator." Messrs. Osgood & Co. send out this book in their usual faultless style of printing and binding.

CROSSING THE PASTURE—Mr. J. A. S. Monks's etching, "Crossing the Pasture," which is given to all subscribers to the Magazine of Art for 1885, is as tempting a bait as a publisher ever held out to an art loving public. Mr. Monks's water color drawing from which he made this etching was recently exhibited at the National Academy of Design, where it attracted a great deal of attention and praise. In the etching the effect of color is wonderfully well given, and to a certain extent the work of the needle is more pleasing than that of the brush. The

feeling of twilight is caught with more success in the etching, and the peculiar quality of the sheep's wool is shown with great fidelity. There is a great deal of charming sentiment in this picture, which when appropriately framed will be an attraction to any wall, or in a portfolio will honor any collection. This etching will not be offered for sale under any circumstances. Cassell & Co., New York, are publishers of the Magazine of Art.

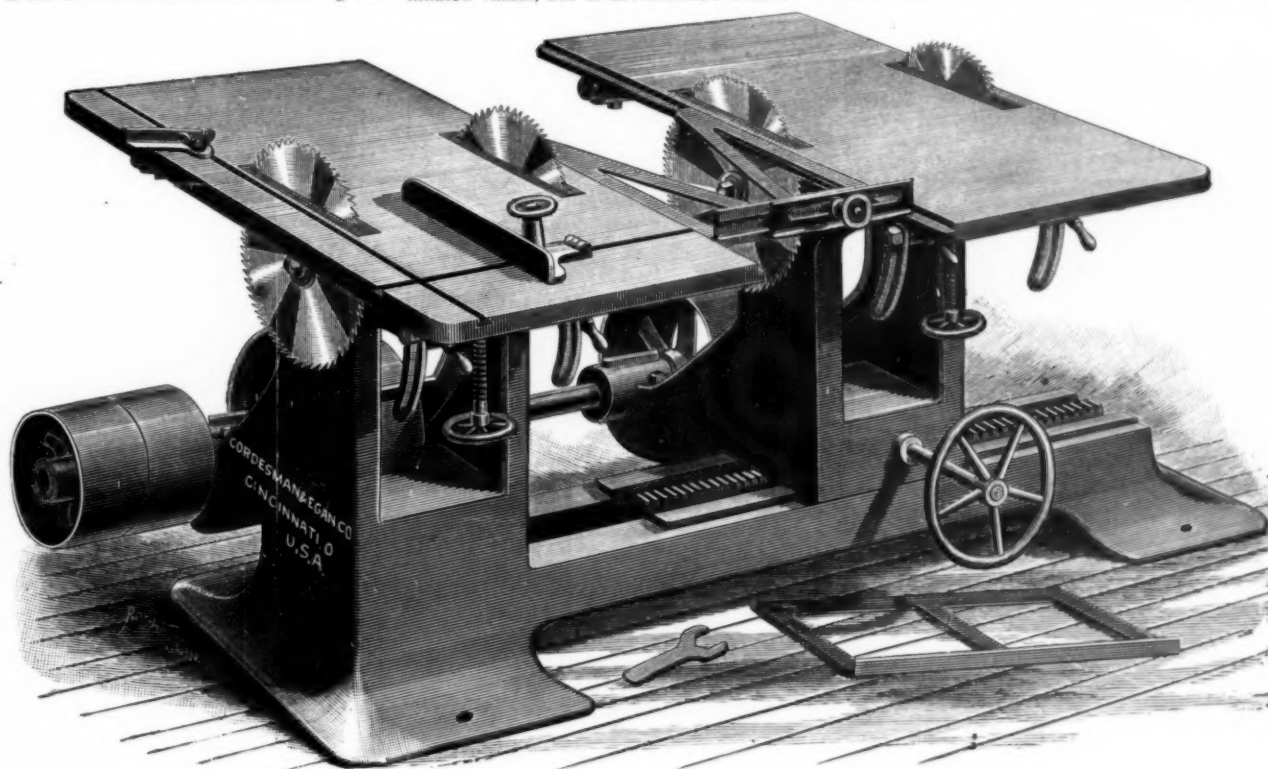
THE numbers of *Littell's Living Age* for Nov. 29th and Dec. 6th contain, *The Works of Alexander Pope, Edinburgh; Country Life, and The Crocker Papers, Quarterly; Some Lessons from Carlyle's Life, National Review; Mrs. Montagu, Temple Bar; A Marshall's Training, and Chinese Horticulture, All the Year Round; Artificial Jewels, Chambers's; "Quiet Weather," Spectator; with instalments of "Beauty and the Beast," and "Alexander Nesbitt, Ex Schoolmaster," and poetry. Littell & Co., Boston, are the publishers.*

THE CURRENT says that it is justified in stating to its readers that its double Christmas number, to be issued December 20, will be found to be in point of interest, variety, scope and brilliance of its contributions, the most attractive ever offered by any periodical. It will present contributions from between thirty and forty eminent writers of the United States, Canada and Europe.

Important to Southerners.

Persons arriving in New York via Cortlandt Street Ferry, by taking the 6th Avenue Elevated Train, corner Church and Cortlandt streets, can reach the Grand Union Hotel in 42d street, opposite Grand Central Depot, in twenty minutes, and save \$3 carriage hire. If en route to Saratoga or other summer resorts via Grand Central Depot, all baggage will be transferred from hotel to this depot free. 600 elegantly furnished rooms \$1 and upwards per day. Restaurant the best and cheapest in the city. Families can live better for less money at this hotel than at any other first-class hotel in the city. †

If you are not already a subscriber to the BALTIMORE MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year or six months for \$1.50.



NEW DOUBLE CUT-OFF SAW.

each other. Further information can be obtained from The Egan Co., 228 to 248 W. Front street, Cincinnati, Ohio.

MR. JAMES D. STANLEY, of Charleston, S. C., is operating a patent process and apparatus for treating timber, which is claimed to be an improvement upon all other processes for the preservation of wood, known as kyanizing, burnettizing and creosoting.

By this process, the piling or other timber is taken in a green state, denuded of bark, and passed through an open flue or cylinder, heated by furnace fires. In its passage through the cylinder the moisture is expelled, the timber thoroughly dried, and its surface completely carbonized, equally and uniformly on all its faces. On its passage from the drying and carbonizing cylinder, the timber is treated with creosote oil which is readily absorbed and permeates the pores of the wood to the depth of three or more inches.

Works for the treatment of timber by this process have recently been erected, and are now in operation at Wilmington, N. C. Four cargoes of timber prepared by this method have been shipped to Panama and proven very satisfactory. The apparatus is simple in construction, and in its working requires the employment of only ordinary laborers—no skilled workmen being required, the cost of treating piles being very small.

Mr. Stanley is also manufacturing pine wood oil.

Property is not assessed higher now, in proportion to its value, than it was in 1879. As States have grown richer the rate of taxation has decreased. In this and some other of the Southern States the State rate of taxation is remarkably low.

It is only within the last three or four years that the growth of the South in wealth has attracted the attention of the capitalists of the North to any great extent, and even now, outside of a small circle, the advantages the South offers to investors are not known.

In any of the States named above money readily commands from 8 to 10 per cent. with excellent security. The great majority of Northern people who have money to loan are not realizing more than 4 per cent. for it. They would gladly send their money South if they could be convinced that it could be safely invested. To satisfy themselves on this point they have only to investigate for themselves.

The money of the North made the Western States what they are. In 1878 the insurance companies of Connecticut alone had \$50,000,000 invested in the West. Almost all of this money was placed on farms and secured by first mortgages. What was done for the West by the capitalist and moneyed

raised the author to the summit of literary distinction. It was inspired by reminiscences of his visit to America, a visit filled with romance and adventure, and although written by a Frenchman is just as thoroughly and characteristically American as Longfellow's "Hiawatha." An eminent literary critic, Dr. Richard Garrett, of the British Museum, speaks of the "exquisite style, impassioned eloquence, and glowing description of nature" to be found in this volume, which he pronounces "a more emphatic and highly colored Paul and Virginia." It has been well said that the "name of Cassell on a publication is a sufficient guarantee of excellence" and certainly this is true in this case. "Atala" is a volume worthy of the reputation of this well known publishing house; it is superbly printed and illustrated, and as a holiday book will have few superiors.

Messrs. Cassell & Co., of New York, have lately issued a very handsomely illustrated catalogue of fine art and juvenile publications suitable for the holidays, which will be sent upon application. Their holiday books are always among the best that can be found.

WHERE THE BATTLE WAS FOUGHT, by Charles Egbert Craddock, Boston: James R. Osgood & Co.

Mr. Craddock has already won high praise from the critics for his first work "In the

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

The Georgia Pacific Railroad has commenced to build a round house in Birmingham, Ala.

H. C. Forbes and John Johns, both of Anniston, Ala., have removed to Irona, Ala., where they will mine iron ore, having contracted to deliver 150 tons a day.

L. W. Tyson, Whitehall, Ala., is rebuilding the grist mill and ginnery lately burned.

Graber & Sons, Athens, Ala., are pushing work on their planing mill, previously mentioned.

The Dayton Coal and Iron Co., of Dayton, Ala., have purchased iron and coal lands near Miller's Station, Ala., and are building a three-mile railroad from the latter place to this property.

ARKANSAS.

Arrangements have been made for building a cotton compress in Helena, Ark.

Arrangements are being made for rebuilding the Morrilton Furniture Factory, Morrilton, Ark., lately burned.

FLORIDA.

W. W. Faulkner will erect a saw mill in DeLand, Fla.; has already purchased part of machinery.

W. N. Clark, Lakeville, Fla., has ordered machinery for a large saw mill.

Drew, Hazeltine & Livingston, Jacksonville, Fla., will build a new marine railway for hauling and repairing large vessels; have already purchased the ground and will spend about \$20,000.

GEORGIA.

The Atlantic, Gulf and Northwestern Railroad has been incorporated at Atlanta, Ga., by Martin & Hobbs, Daniel Pittman, and John S. Wise, for capitalists outside of the State, whose names are not given, to build a road from Ducktown, in Fannin County, via Atlanta, to some point in Thomas or Decatur county.

The Rome Street Railroad Co., Rome, Ga., previously mentioned, has been incorporated.

Chris. Milner and Sam. Galloway, Cartersville, Ga., have rented a building and will put in flour and grist machinery.

Henry Matthews will build a \$10,000 hotel at Barnesville, Ga.

H. C. Clement, of Chicago, president of the Georgia Marble Co., of Tate, Ga., says that a Boston company will invest over \$100,000 at Marietta, Ga., in building works for cutting marble. The Georgia Marble Company will largely increase its output of marble to meet demand from this new company as well as from other sources.

The Chattanooga, Columbus & Florida Railroad, a part of which has been graded, was lately sold by its owners, Messrs. Wm. & S. G. McLendon, of Thomasville, Ga., L. O. Jackson, of Bainbridge, and others, to New York capitalists who contracted to complete the road between Bainbridge and Cuthbert within the next 12 months.

The Amoskeag Lumber Co., of Eastman, Ga., is adding planing mill machinery to its saw mill.

A company is being organized in Fort Valley, Ga., to establish a foundry and machine shop.

The survey for the Dublin & Wrightsville, Ga., Railroad has been commenced; office in Wrightsville.

James Atherton, of Toonigh, Ga., has completed his cotton factory and put in the machinery.

A new mining plant at the Columbia mine, near Dahlonega, Ga., is being put in position, the mill building having been completed. The Gordon mine at the same place is nearly ready for work.

C. H. Oscorn & J. W. Houchin, previously reported as having decided to establish a foundry at Griffin, Ga., are receiving their machinery.

KENTUCKY.

An Edison Electric Light Company will probably be established in Newport, Ky.

The Wilder-Faulkner Co., capital \$100,000, has been organized in Louisville, Ky., to manufacture flour mill machinery.

The Citizens' Natural Gas-Light and Fuel Co. has been organized in Louisville, Ky., by R. W. Meredith, H. W. Kohnhorst, Harry Stucky, John S. Cain, and others, for mining for oil salt, boring for gas &c. Capital \$100,000.

LOUISIANA.

The Honduras, North Coast Railway and Improvement Co., capital stock \$10,000,000, has been organized in New Orleans, La., by John C. Febriger, Jr., John A. Grant, Samuel B. McConico and others, to build a railroad in Honduras.

The Crescent City Sugar Refinery Co., of New Orleans, La., contemplate altering their buildings and putting in necessary machinery for manufacturing beer.

The Sherman-Lemarie Gas Co., a new company, will erect gas works in New Orleans, La.

MARYLAND.

M. C. Blessing and F. B. Rice, of Jefferson, Md., have purchased Simmons' mill at Buckeystown, Md.

Mr. Brennaman, near Easton, Md., has rebuilt his saw mill lately burned.

Geo. R. Skillman, of Jas. Beatty & Co., of Baltimore, has purchased a large house in Baltimore, which he will use as a cracker factory.

John J. Buck, Havre de Grace, Md., has commenced the erection of his saw and planing mill, previously reported.

M. E. Bell, supervising architect, treasury department, Washington, will receive proposals till December 20, for the materials required for the erection of the Marine Hospital at Baltimore.

NORTH CAROLINA.

A company is being organized to build a railroad from Weldon to Raleigh, N. C.

Moore & Brady, Newberne, N. C., will enlarge their oyster packing house.

Surveys are now being made for the railroad to be built by Boston capitalists, as lately mentioned, from Gaffney to Rutherfordton, N. C. The road is to be finished by October 1, 1885.

The Raleigh Air Line Railroad, Raleigh, N. C., will extend their line to Bennettsville and Clio.

H. I. Freeman, Palmersville, N. C., desires to correspond with bobbin manufacturers and bobbin machine manufacturers, with a view to buying machinery immediately.

Arrangements are being made for establishing an electric light company—a branch of a New York company—in Charlotte, N. C.

The New York Newspaper Union has established a branch in Charlotte, N. C., and will put in 15 H. P. boiler and engine.

G. L. Miller, Winston, N. C., whose planing mill is reported in this issue as burned, will probably rebuild again on a much larger scale, putting in a complete set of machinery. The Winston Agricultural Works, which were run in connection with this business, will be started up again if Mr. Miller rebuilds as he expects to do.

SOUTH CAROLINA.

The Augusta and Edgefield Railroad Co., capital not to exceed \$1,000,000, will be incorporated in South Carolina to build a railroad from Edgefield, S. C., to Augusta, Ga. James Callison, D. R. Durisoe, Thomas J. Adams, R. M. Mitchell and others, are incorporators.

W. H. Mays, of Bradley, S. C., whose grist mill and ginnery were lately burned, will rebuild next spring or summer.

D. J. Knotts, W. F. Rast, J. H. Hydrick, and others, have organized the Sandy Run Tramway, to build a tramway from St. Matthews, S. C., to the Blackville Road.

Darlington, S. C., is figuring on water works. The mayor can give particulars.

The Smoke Tramway Co., Smoke, S. C., has been incorporated.

The Greenwood, Abbeville and Ellenton Railroad Co. has been organized in South Carolina.

W. B. Vardell and others, of Charleston, S. C., will probably organize a company to manufacture a new grain separator.

TENNESSEE.

A. J. Patterson, Union Depot, Tenn., has contracted for a roller flour mill, capacity 75 barrels a day.

Wm. Ross, previously mentioned, will probably locate his proposed barrel and keg factory in Knoxville, Tenn.

J. T. Wilder, of Chattanooga, Tenn., previously reported as intending to build a large hotel on Lookout Mountain, is now constructing it; will furnish with hot air machinery, and will also need a stationary engine to draw a car by steel rope up the mountain.

S. M. Winchester, of Chattanooga, Tenn., has sold a tract of timber land for \$30,000 to Dewey & Son, of Kalamazoo, Mich., who will build a large sash and door factory in Chattanooga. Mr. Winchester will erect in the same city a warehouse to cost about \$30,000.

A. B. Luther will erect a saw mill at West Harpeth, Tenn.

G. A. McLane, Lawrenceburg, Tenn., is erecting a planing mill to run in connection with his saw mill.

The Beck, Bransford & Ekdahl Furniture Co. has been incorporated at Union City, Tenn., to continue the furniture manufacturing business of Beck & Bransford and the Ekdahl Furniture Co.

T. F. Wood, now wholesale grocer, Bristol, Tenn., will go into flour milling business.

The Edgewood Street Railroad Co. has been organized at Knoxville, Tenn., by A. H. Martin, O. P. Winklin, James C. White, F. A. Moses, and W. L. Ledgerwood.

S. P. Montgomery is putting up a saw mill near Sweetwater, Tenn.

The Sherman Manufacturing Co., of Jackson, Tenn., are erecting additional buildings, and will put in more machinery for their foundry and machine shop.

The Cumberland Mountain Railroad Co. has been organized in Tennessee by John P. White, James McLaughlin, W. E. McNeily, Percy Maddin and others, to build a railroad to the coal fields in the Cumberland Mountains in Marion and Grundy counties.

W. B. Bachman, of Elizabethton, Tenn., has purchased the Patterson flour mill at Union Depot, Tenn.

TEXAS.

W. P. Gilbert, Clifton, Texas, will build a 125 barrel roller flour mill.

T. J. Pampell, F. Fisher, D. C. Giddings, and others, have organized a company in Brenham, Texas, to build a street railroad.

There is a prospect of a cotton seed oil mill being established in Dallas, Texas.

A \$300,000 bridge will probably be built across the Rio Grande at Laredo, Texas.

The Gainesville Lock Co. has been chartered at Gainesville, Texas, to manufacture locks, fastenings, &c.

Laing & Ratican, Fort Worth, Texas, have received contract, for doing sewer work at that city to extent of \$90,000.

Lampasas, Texas, is figuring on water works.

The Mayor and City Council, of Beaumont, Texas, have decided to issue \$15,000 of bonds to build water works. H. W. Smith is mayor.

An electric light company has been organized in San Antonio, Texas, with Ed. Braden president, L. M. Gregory secretary, and Peter Shields treasurer.

Plans have been prepared for a new city hall to be built in Austin, Texas.

The Brenham Street Railway Co., previously mentioned, has been chartered at Brenham, Texas, to build a street railroad.

L. Wagenhauser, lately reported as having decided to build a brewery in Dallas, Texas, has commenced work on the foundation of his building; will cost \$150,000.

The Mayor and City Council of Waco, Texas, have employed A. S. Hayne, of Fort Worth, Texas, to prepare plans for water works.

Vickers & Sons, of Alvarado, Texas, have been enlarging their distillery and putting in new machinery to extent of about \$20,000.

The Queen City Railroad Co. has been organized at Fort Worth, Texas, to build a street railroad.

VIRGINIA.

The Waverly Milling Co., Waverly Station, Va., have nearly finished their mill.

Kingley & Bro. will establish a creamery at Hamilton, Va., for making butter, &c. Will put in a steam engine.

The Richmond, Va., Mozart Association invite proposals till January 5 for building a \$25,000 public hall. A. Bargamin, 907 E. Main St., Richmond, can give particulars.

W. N. Martin, Cave Spring, Va., has discovered a zinc and silver mine on his property, and has sunk a shaft for taking out ore.

It is probable that a company will be organized in Alexandria, Va., with John S. Barbour, president, to build a new style of cattle car lately invented. The capital is to be \$500,000.

The Rappahannock Machine Co. has been organized at Tappahannock, Va., to establish foundry and machine shop, and also to operate flour and planing mill.

WEST VIRGINIA.

Walter B. Brooks, Wm. A. Quarrier and others, Charlestown, W. Va., will organize an Electric Light Company.

The Danville Woolen Mills, Kasson, W. Va., lately reported as burned, (loss \$14,000), will be rebuilt. It is expected that the building will be finished by spring.

Wm. Braugh and Charles Kagu, of Grand Rapids, Mich., contemplate building a shingle mill somewhere in the South.

BURNED.

G. L. Miller's planing mill and Little Queen Harvesting Machine Works, Winston, N. C.

Mill and gin of John A. Green, near Waynesboro, Ga.

A boiler explosion in saw mill of Edmund Scott, Liberty Mills, Va., did much damage. Spoke and handle factory of S. Perry, High Point, N. C. Loss \$6,000.

Mayfield Woolen Mills, Mayfield, Ky. Loss \$15,000.

Mill of Samuel Perkins, near Wilson, N. C.

Sugar house of Alex. Ribbeck, near New Iberia, La.

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Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.

Extracts from the Proposed Spanish Treaty.

TARIFF—A.

Articles the product of the Provinces of Cuba and Porto Rico to be admitted into the United States on the following conditions: Free from duty: Horses, cocoa, coffee, fish, fresh fruits, cotton, hemp, flax, hides, skins undressed, aniline and mineral dyes, palm oil, sugars not above No. 16 Dutch Standard in color, loaves of crystallized syrup of the sugar cane, melada, molasses, seeds, woods, cast iron, eggs, honey, wax, sponges, bones, guano, manure, coca, esparto, horse hair, rushes, osiers, straw, coins of gold or silver. Subject to duty: Cigars, cigarettes, *begueros*, \$1.25 per pound, 12½ per cent. ad valorem; tobacco leaves, requiring more than 100 to the pound, if having stems, 37 cents per pound, without stems, 50 cents; other tobacco in leaves having stems, 17½ cents per pound; tobacco manufactured of every kind, tobacco without stems, 20 cents per pound; snuff, powdered tobacco, 25 cents per pound; tobacco not manufactured, 15 per cent. ad valorem.

Articles, the produce of the United States, which shall be admitted into Cuba:

TARIFF B.

Exempt from duty, beer, fresh meats, bacon, fruits, fish, shell fish, grain, and other cereals, excepting rice, flour of cereals other than rice, lard, swine, beef, cheese, eggs, and bread, woods of all kinds, staves, knees, timber, pipes, boxes of wood, cattle, sheep, and goats, hogs, stones and earths employed in construction and in the arts and industries, clay, tiles, bricks, and tiles unglazed, hides, and undressed skins, minerals or metals, coins of silver and gold, useful tools, agricultural implements, agricultural apparatus, industrial and scientific motors of classes and materials, separate parts of the same, raw cotton, hemp, flax, jute, and all other raw vegetable fibres, wools, hog's hair, raw horse hair, asphalt, refined bitumen, tar, pitch, and resin, petroleum, raw or crude, mineral and vegetable coals, mineral waters, trees, plants, vine shoots and seeds, natural and artificial manures, marble, jasper, alabaster in blocks and sheets, rough or prepared, other stones and earths employed in construction, minerals and metals, mineral waters ice, cast iron in pigs, and all forms of waste in steel and iron, cast iron in tubes, the same manufactured, malleable iron and steel in bars and all classes of wire in copper and iron, nails, screws, rivets, wrought iron tubes, wire gauze, unmanufactured.

TARIFF C.

Substances used in chemical industries, drugs, samples, seeds of cotton, and all oleaginous products of the same except oils, tanning liquids, grease, and all other animal oily substances unmanufactured. Not comprised in this tariff:

CLASS D.

Cotton and its manufactured forms, raw cotton with or without seeds.

CLASS E.

Other vegetable fibres and their manufactured forms, hemp, flax, jute, and other raw vegetable fibres.

"THE NEW SOUTH" will be a valuable publication for all who want to know what the South has to offer to the capitalist, the settler, or the tourist.

THE Citico Furnace, Chattanooga, Tenn., which has been undergoing extensive repairs, will blow in about January 1. The outlook for Southern furnaces is reported as quite encouraging, despite the very low prices of iron.

The Wells Patent Compound Balance Engine.

Since the time of Watts, every improvement on the steam engine has been succeeded by still further improvements, caused by the greater requirements of the age and the adaptation of the steam engine to the varied wants of transportation and machinery in need of increased power, economically used, brings forcibly before the public "The Wells Patent Compound Balance Engine," invented by Justin R. Wells, of New York. The accompanying cuts represent two different views of the "Wells" Engine. A is the smaller and high pressure cylinder; B is the steam chest therefor; C is the larger and low pressure cylinder; D is the steam chest therefor. The small piston traversing in the high-pressure cylinder is marked C, and is connected with piston-rod F, cross-head G, connecting rod J, and crank K. The larger piston, D,

cut off at any point in the stroke in either cylinder, each independent of the other, by which means the best results in expansion can be obtained and both cylinders made to do equal duty. The important advantages claimed for this engine, compared to those in general use, are as follows:

"It is more economical in fuel. It will give greater speed of vessel. It is simple, very durable and compact. It will give higher speed of piston. It is lighter, and occupies less space. It will give more revolutions of propeller. It is self-contained, and will not shake the vessel. The reasons why are—the steam pressure being equally exerted on the cylinder heads in opposite directions—no strains are transmitted to the engine frame or its connections—i. e., by reason of the perfect balance; were the cylinders and pillow blocks placed horizontally, with no engine frame between, the engine would transmit its power to the shaft without movement to either."

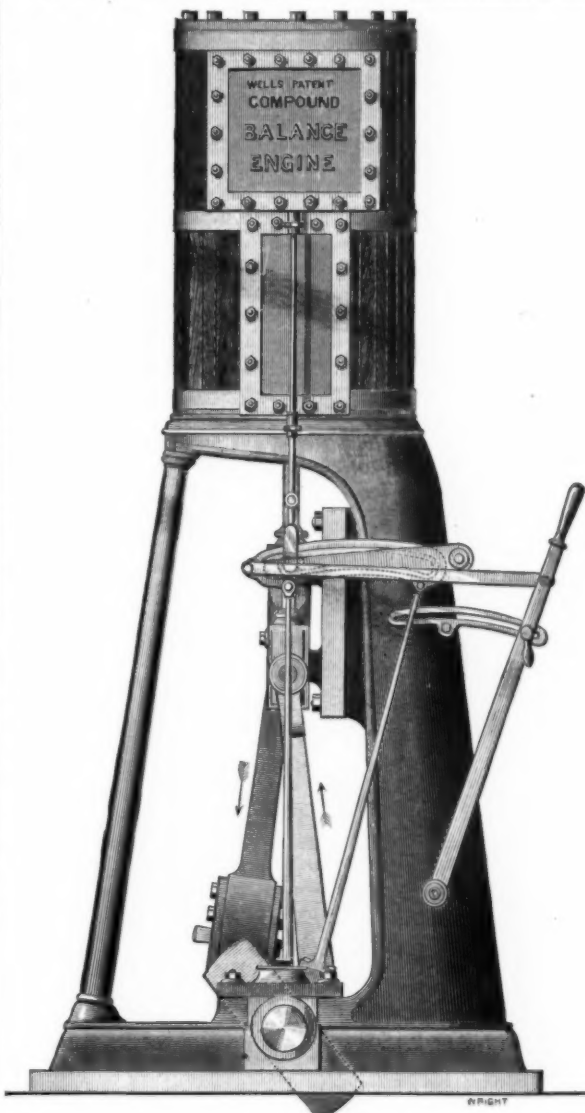


FIG. 1.—Engine in line of shaft.

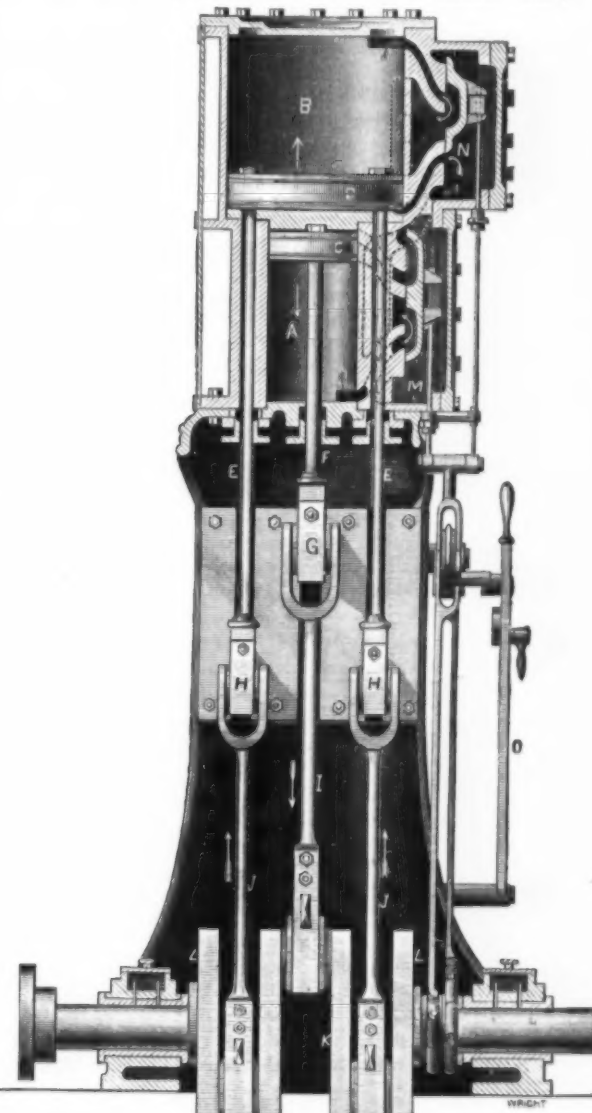


FIG. 2.—Inverted plan, showing the two cylinders.

in the low-pressure cylinder has two piston rods, E E, connecting two crossheads, H H, two connecting rods, J J, and two cranks, L L, connected to the main shaft. The two cranks, L L, are parallel to each other, and are arranged on the shaft on the opposite side from the single crank K, piston rods E E, pass through a corded sleeve to cylinder B, cast on the outside of cylinder A. High steam is admitted into cylinder A, and exhaust steam into cylinder B, simultaneously. As shown in Fig. 2, it enters the upper end of cylinder A and the lower end of cylinder B, driving pistons C and D apart. For the return stroke it enters the lower end of cylinder A and upper end of cylinder B, driving them together, completing the revolution.

For convenience, D valves are shown in Fig. 2, although any preferable gear may be used. The valve motion designed to be used with this engine is durable, very effective, and will control both cylinders perfectly. It is arranged so that the steam can be

The weight of pistons C and D, with their connections, being equal, their momentum will be perfectly balanced at any speed and at every point in the revolution. The descending steam pressure on piston C is balanced by an equal ascending pressure on piston B, (both moving in the same plane), which relieves the main bearings of all pressure and friction except that which is due to the weight of the shaft and the moving parts of the engine. That fact alone insures great economy, as the greater part of the total friction of the unbalanced engine in general use is obviated. For that reason, high rate of speed of shaft can be maintained without vibration or heating, and therefore the pitch of the propeller may be proportioned to get the best possible results, as the speed of the engine shaft will be sufficient to meet any requirements. Owing to their freedom from friction the main shaft bearings will retain their original forms, as the wear will be uniform in its whole circuit. High speed of piston can be obtained, reducing cy-

linder condensation, and will allow the use of an engine of less size and weight for a given duty. When extraordinary speed of vessel is required, the hull may be filled with boiler power and transmitted on this system without destructive effect.

For stationary work, horizontal machines are furnished if required, and are fitted with automatic valve gear.

HOW THE FARM PAYS—A handsome volume of about 400 pages has just been published by Messrs. Peter Henderson & Co., of New York, the well known seedsmen. This book embodies the experiences of forty years of successful farming and gardening by the authors—Mr. William Crozier, a notably successful farmer, and Mr. Peter Henderson who,

although not a farmer, has long been considered an authority upon all matters relating to practical gardening. The book is plain, practical and thorough in its teachings, and there are few farmers in the country who would not be benefitted by a study of it. A merchant or a manufacturer must carefully seek information wherever it can be found that will aid him in making a success of his business, and we cannot understand the indifference of so many farmers to everything, the study of which might tend to make their work more profitable. "How the Farm Pays" should be read by every farmer, and more especially by those who do not succeed in making their farms pay.

Every man in the South should have a copy of "THE NEW SOUTH." The price is low. See Prospectus published elsewhere.

Business Chances.

For the purpose of making the MANUFACTURERS' RECORD a still more valuable medium of communication between its readers North and South, we will publish, FREE OF CHARGE, short advertisements, not exceeding 40 words, from those in the South who have mills, factories, manufacturing sites or water-power for sale, capital wanted for industrial enterprises, &c., &c.; while readers in other sections who desire to engage in manufactures at the South are also invited to use these columns, without cost, either in seeking information regarding the advantages and special claims of different localities, or for asking about good openings for men and money. This department is also free for Southern manufacturers who wish to advertise for mill managers, superintendents, engineers, &c.

In corresponding with any of these advertisers please mention the Baltimore Manufacturers' Record.

A GENTLEMAN in the South desires to join others in forming a stock company for the purpose of erecting and operating a Cotton Seed Oil Mill, either in Georgia, Alabama, Mississippi or Texas. Would be willing to take good share of the capital stock, under a good management. Address Oil Mill, care MANUFACTURERS' RECORD.

FURNITURE BUSINESS.—Half interest in the Athens Furniture Works, Athens, Tenn., is offered for sale; price \$2,000. Splendid chance for a good, active man. Good new outfit; plenty cheap lumber; remaining partners good mechanics, economical and industrious. A business manager wanted as partner, with some cash capital. Address J. C. MANSFIELD, Merchant Miller, Athens, Tenn.

I, THE INVENTOR of a Grain and Fertilizer Drill, which is pronounced superior to anything of the kind ever made, desires to correspond with capitalists or manufacturers, who can take hold of this invention and push it. Full particulars upon application to X. Y. Z., care MANUFACTURERS' RECORD, Baltimore, Md.

WANTED—Co-operation to rebuild the Pulaski (Tenn.) cotton and woolen mill, burnt last July. Stone foundation 50x106, brick stack, new 90 H. P. boiler, brick to rebuild a store, with 2 els, 7½ acres, 3 good large brick tenements, 2 frame tenements, store warehouse, stable shop, machine shop tools, and some money will be put in, unfailing spring water for steam, good location, and a good chance for investment. Apply to G. & M., Box 10, Pulaski, Tenn.

THE SUBSCRIBER offers a splendid location for saw mill, planing mill, or tight barrel factory, large lot with 30 H. P. engine and boiler, two story building, 35 x 75 feet and a large mill house. Situated in a thriving town on E. T. V. & G. R. R., in Georgia, with plenty of pine, and an inexhaustible supply of the finest white oak easy of access. Will sell the property, or invest it with the proper parties to put into the above or kindred business. Address J. R. Schofield, 156 Cherry street, Macon, Ga.

MR. G. H. RAWLINS, Rome, Ga., would like to receive catalogues of manufacturers of machinery for hosiery and knit underwear.

A PROVIDENCE HOUSE, having superior facilities for handling pig iron, desires to correspond with one or more Southern furnace proprietors with a view of selling their iron in this market. We have an extensive acquaintance with all the iron buyers in this market and a thorough knowledge of the business. With a good iron suitable for machinery that will be uniform in quality and low in price, large quantities can be sold. Address "B," box 1, 196, Providence, R. I.

A BALTIMORE HOUSE, having superior facilities for handling pig iron, desires to correspond with one or more Southern furnace proprietors with a view of selling their iron in this market. We have an extensive acquaintance with all the iron buyers in this market and a thorough knowledge of the business. Address W. J., care MANUFACTURERS' RECORD, Baltimore.

MACHINERY WANTED.—Second-hand 4-4 Looms, Draper, Spooler, Quiller, Warper. Say what make and condition, and give with prices attached. H. G. Hall, Fayetteville, N. C.

A GENTLEMAN who is an expert in the opening and developing of marble and stone quarries, is looking for an opening in the South. Address Harvey, care MANUFACTURERS' RECORD.

FOR SALE.—A Tin, Galvanized-Iron Cornice, Gas and Plumbing Establishment in one of the largest and most prosperous inland cities in the South. A splendid opportunity. Special reasons. For particulars address S. B. Lowe, Chattanooga, Tenn.

WANTED.—A good location for a saw and planing mill, where timber—poplar, pine and oak—is plenty and stumpage can be had. Address P. Master, Kenton, Obian county, Tenn.

WANTED.—Having just patented a new and useful tool, would like to make arrangements with some hardware manufacturer to make them either on royalty or will sell shoprights. Address T. A. P., Box 13, Plymouth, N. C.

FOR SALE.—A foundry and machine shop now doing a fair business, which can be largely increased by additional capital. Has a lot of good patterns for engines and mills, boiler tools, &c., reason for selling, bad health of the owner. Address B & P, box 33, Staunton, Va.

MICA.—Party with some capital wanted to mine Mica deposits in Virginia. Address Pick, care of MANUFACTURERS' RECORD.

WANTED.—A situation as manager of a cotton mill by a manufacturer of large experience. Address S. L., care of MANUFACTURERS' RECORD.

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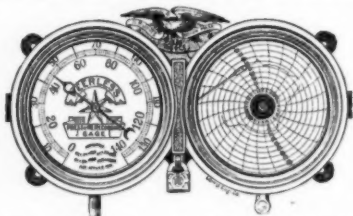
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Without political bias or alliances, it seeks to subordinate legislation to the material interests of the people. It favors Freedom in Banking, Freedom in Commerce, and Freedom in Corporations; demanding for the individual and the association the largest liberty to buy or to sell, to lend or to borrow, anywhere and on any just terms and conditions without artificial restriction.

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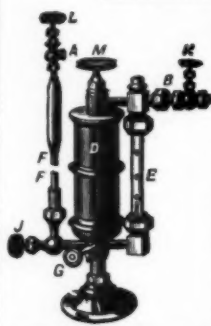
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Take Notice.

The "Sight Feed" is owned exclusively by this company. See Judge Lowell's decision in the United States Circuit Court, District of Massachusetts, Feb. 23d, 1882.—All parties are hereby notified to desist the use, manufacture or sale of INFRINGING CUPS, as we shall vigorously pursue and prosecute all infringers.

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Patapsco Mill A, Ellicott City, Md. Patapsco Mill B, Baltimore, Md.

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THE NEW SOUTH.

An Accurate and Comprehensive Description of the Southern States, Noting each State Separately, and Giving their Distinctive Features and Most Salient Characteristics; Presenting a Vivid and Vigorous Picture of their Resources and Attractions, their Present Condition and Vast Possibilities.

BY COL. M. B. HILLYARD, NEW ORLEANS, LA.

Published by THE MANUFACTURERS' RECORD, Baltimore, Md.

➤PROSPECTUS.◀

The publishers of the MANUFACTURERS' RECORD, in furtherance of their aim to lead in matters promotive of the material interests of the South, beg to state that they will shortly issue a work entitled **THE NEW SOUTH**, from the pen of COL. M. B. HILLYARD, of New Orleans, La. The book is devoted to an exposition of the South. It will treat of topography, soil, climate, woods, water-courses, resources, manufactures and such laws as are needful to be known. It will portray the attractions to the capitalist, and those seeking homes in the South, in the lines of manufacture, horticulture and agriculture. It will show what the South is and what she is likely to become by reason of her almost untouched, and slightly known resources in soil, climate, rainfall, marls, minerals and geographical position, and the vast variety of products possible to a wise and varied husbandry, and a grasp of her rich opportunities for manufacture.

The information is new, broad, accurate, unbiased and abundantly avouched by unquestionable authority.

The book is entirely new in its scope and design, and aims to be a guide to all seeking information on most vital matters. No such book has ever been written; and it meets a want now imperative to those seeking information as to the South.

No one wishing to be informed about the South, either in this country or Europe, can dispense with this book.

The author is well-known both North and South for his long identification with Southern development, and perhaps no one else has contributed more to the general stock of information bearing on the South in the columns of Northern journals. His study of the South has been long, large and unremitting, and he contributes the ripe results of these years of study and personal inspection to the preparation of this book. His many qualifications pointed him out to the publishers as the one most fitted for a duty of such delicacy, magnitude and responsibility. They have, however, preferred not to rely upon their own convictions alone as to the author's fitness for the work. Below is furnished abundant testimony from eminent persons North and South, whose reputation, in some instances, is not limited to this continent, and who have witnessed the work of the author for years, in his attempts to invite attention to the South. These are replies to letters sent out by the publishers enquiring as to COL. HILLYARD's fitness for this work.

The book will contain about 400 pages, and will be sold at a price but little in advance of the cost. It will be handsomely gotten up, and will be a model of typography. Its price will be, in paper covers 75 cents; in cloth, \$1.25. At these prices the sale of the book will not, of course, prove largely remunerative; nor was it with that object that it was undertaken. To the author the writing of it has been a "labor of love," and a furtherance of aspirations for Southern development. To the publishers it affords an opportunity to emphasize, and they hope, signalize, their enterprise, and to contribute a noteworthy indication of their resolve to press the claims of the South upon the capital and enterprise of the world.

The work is confidently commended for the novelty and amplitude of its design, for the breadth and accuracy of its information, for the laboriousness of its research, the many years of study and investigation there formulated, and its conscientious and impartial animus.

The following are letters corroborative of the wisdom of committing this work to COL. HILLYARD:—

From MAJOR S. A. JONAS, *Aberdeen, Miss., United States and State Commissioner from Mississippi to the World's Industrial and Cotton Centennial Exposition*:—"In answer to your favor of recent date I take pleasure in saying that I have known COL. M. B. HILLYARD for a number of years, and regard his selection as the editor and compiler of your book upon the South and its resources, as the wisest and best that could have been made. I do not in saying this pretend to gauge his literary capacity, but I know the man's wealth of information upon the subject you propose to confide to him, and where so much has been stored away in good and acceptable shape, it can hardly come forth any the worse for contact with its treasure house, especially in this instance, where the keeper is a man of character and culture, and withal an amiable and enterprising gentleman."

From PARKER EARLE, Esq., *President of the Mississippi Valley Horticultural Society, and Chief of the Horticultural Bureau of the World's Industrial and Cotton*

Centennial Exposition:—"Your engagement of COL. M. B. HILLYARD, of New Orleans, to write your proposed book, descriptive of the South and its varied resources, is a very fortunate one. I think there is no man in the country possessing so many qualifications for doing it accurately, ably and in a pleasing manner. I wish your enterprise great success."

From DANIEL DENNETT, Esq., *Agricultural Editor of the New Orleans Picayune*:—"I have just received your note. I have been acquainted with COL. HILLYARD for more than eight years. I know no man who has studied the interests of these States more intently than he, or with more ardent desire to benefit the South. He has acquired a vast amount of valuable information about the agricultural resources and mineral wealth of these States, and has the ability to put his information in readable shape. I consider him scrupulously honest, and his character above reproach. No man has shown more zeal or industry than he in efforts to promote the best interests of the Southern people. He is popular, and makes friends wherever he goes; and his friends are the best informed people in this country. He has a happy faculty for collecting such facts as you need for the book you intend to publish."

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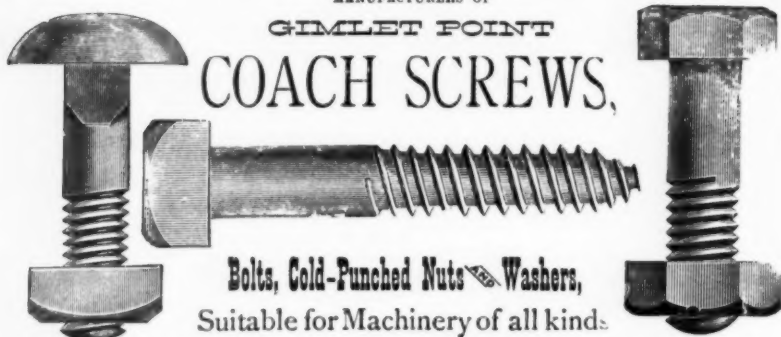
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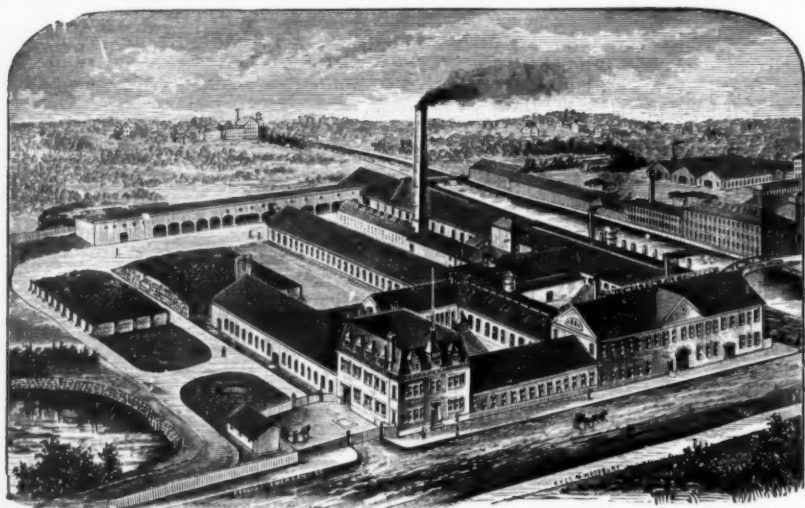
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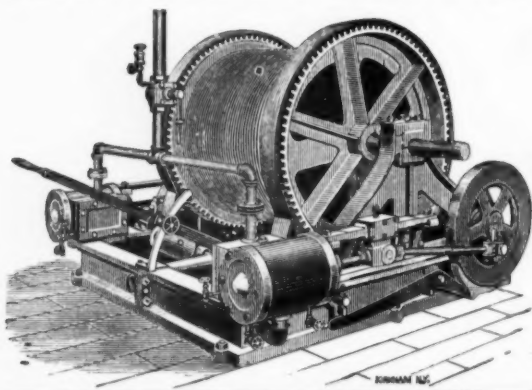
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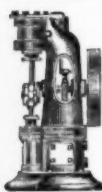
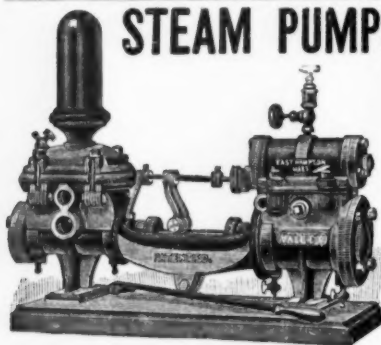
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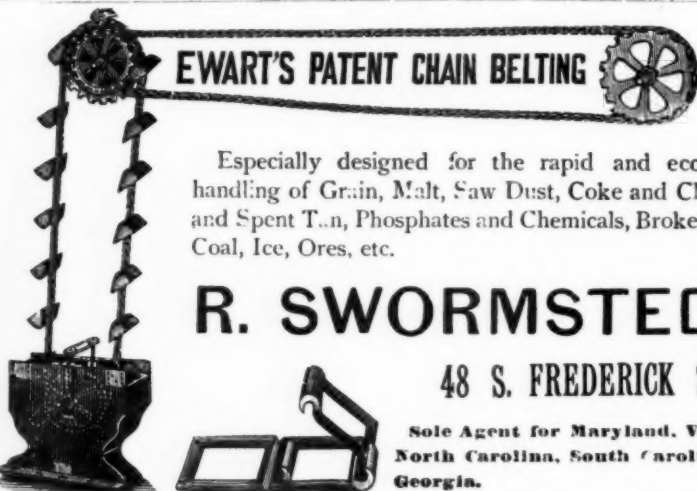
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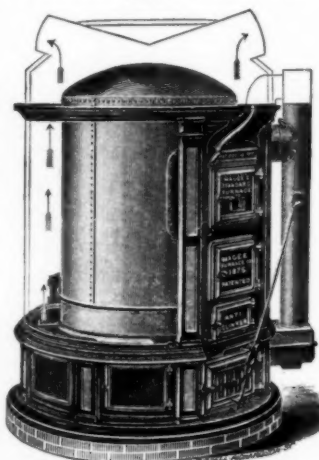
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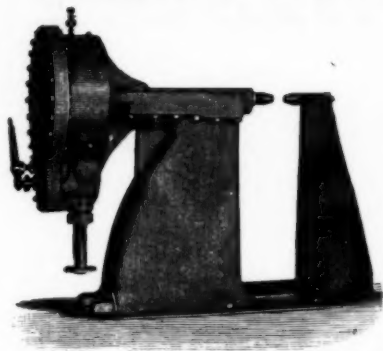
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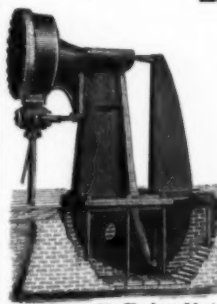
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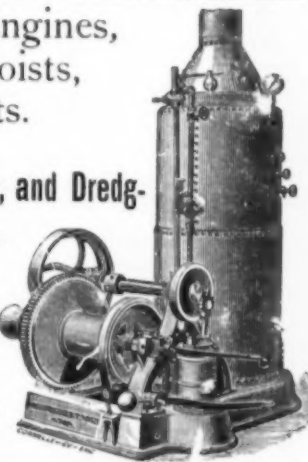
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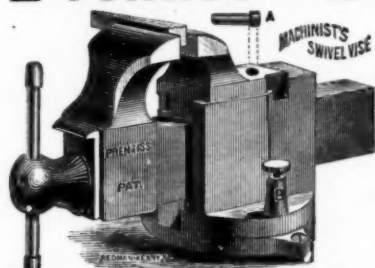
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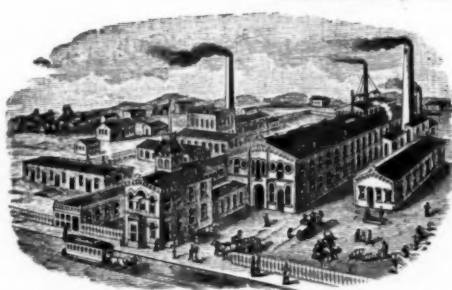
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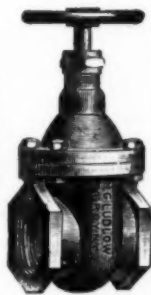
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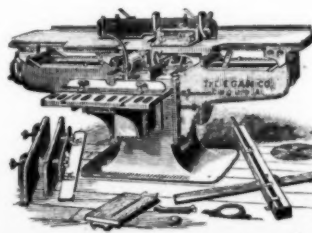
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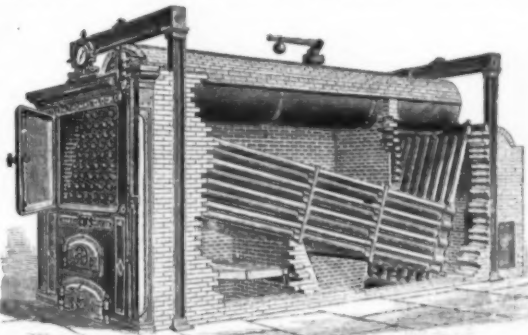
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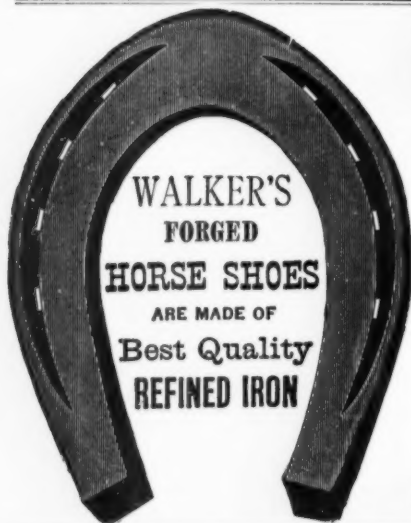
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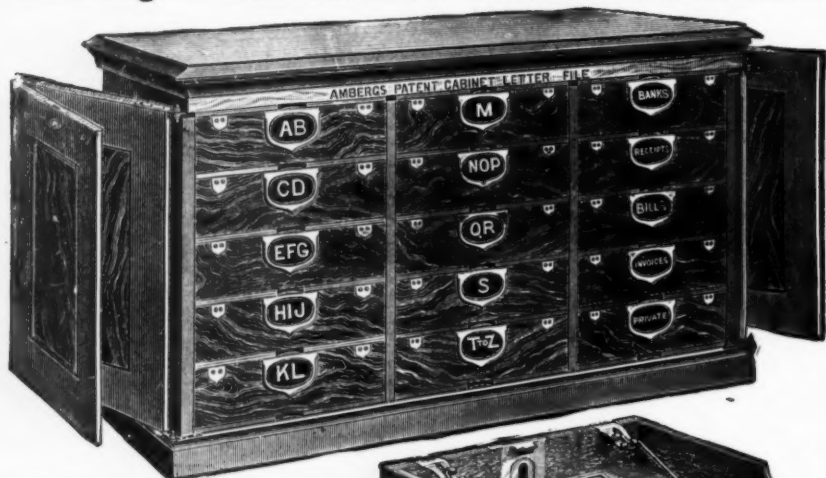
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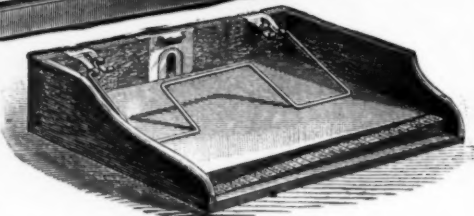
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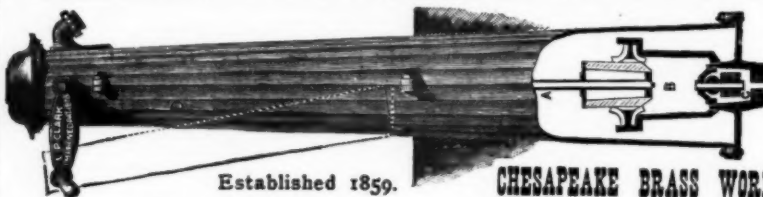
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Cow, Kentucky, Sargent's List.....	dis 55% to 10%
Cow, Moore's or Dodge's, Genuine Ky., new list:	
Nos. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000	

LAWN MOWERS. Buckeye, Easy and Excelsior, new list.dis 30 1/2 Wire Clothes, Galvanized, 100 feet.dis 25 1/2 LOCKS AND LATCHES. Cabinet, Eagle.Changes made in list price Cabinet, Gaylord.of some numbers Jan. 1, Cabinet, Bridgeport.1881, dis 25 1/2 Cabinet, P. & F. Corbin.dis 40 1/2 Trunk, new list, Jan. 1, 1881.dis 15 1/2 Yale Lock Co., Flat Key.dis 33 1/2 DOOR LOCKS, ETC. Bradford.dis 40 1/2 Norwich.dis 40 1/2 P. & F. Corbin.dis 40 1/2 Russell & Erwin.dis 40 1/2 Mallory, Wheeler & Co.dis 45 1/2 Padlocks—Russell & Erwin.dis 45 1/2 Mallory, Wheeler & Co.dis 45 1/2 Norwich Lock Manf. Co.dis 45 1/2 Wm. Wilcox & Co.dis 45 1/2 Yale Lock Manf. Co.'s "Standard".dis 45 1/2 Conestoga.dis 75 1/2 Scandinavian, "Norwich".dis 50 1/2 MALLETS. Penfield Block Co., Apple, Hickory and Lignumvitae.dis 30 1/2 MEAT CUTTERS. Dixon's (P. S. & W.) Nos. 1, 2, 3, 4.dis 35 1/2 Perry's, Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.dis 35 1/2 Woodruff's (P. S. & W.) Nos. 100, 150.dis 35 1/2 Hales' Nos. 11, 12, 13.dis 35 1/2 Kieser's No. 55.dis 40 1/2 Kieser's Gem.dis 40 1/2 Kieser's No. 82.dis 40 1/2 Kieser's Monarch.dis 40 1/2 Beef Shaver, (Enterprise Manf. Co.).dis 25 1/2 MOLASSES GATES. Stebbins Patterns.dis 70 1/2 Stebbins Genuine.dis 67 1/2 Stebbins Tinned Ends.dis 40 1/2 Chase's Hard Metal.dis 50 1/2 Self-Measuring, (Enterprise).dis 20 1/2 Lincoln's Pattern.dis 60 1/2 Weed's.dis 15 1/2 Boss Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.dis 15 1/2 Boss, Japanned Finish.dis 60 1/2 Boss, Bronze Finish.dis 50 1/2 NUTS AND WASHERS. Square Nuts.8 c off list. Hexagon Nuts.8 1/2 c off list. Washers.7 1/2 c off list. OILERS. Zinc and Tin.dis 60 1/2 Brass and Copper.dis 50 1/2 Malleable (Hammer's).dis 50 1/2 PINKING IRONS. Per dozen.75 cts. net PLAITING MACHINES. Astor Plaiting Machine.each \$15, dis 20 1/2 Crown Plaiting Machine.dis 25 1/2 6 in., \$6; 10 in., \$8 each. PLANES AND PLANE IRONS. Bench, First Quality.dis 20 1/2 Bench, Second Quality.dis 25 1/2 Molding.dis 15 1/2 Bailey's (Stanley R. & L. Co.) New list, Jan. 1, 1879.dis 20 1/2 The Stanley (S. R. & L. Co.) new list, Jan. 1, 1879.dis 20 1/2 Bailey's.dis 20 1/2 Plane Irons, Butcher's.dis 50 1/2 Plane Irons, Auburn Tool Co.dis 20 1/2 Plane Iron, Ohio Tool Co.dis 20 1/2 Plane Irons, Sandusky Tool Co.dis 20 1/2 PLIERS AND NIPPERS. Button's Patent.dis 33 1/2 Hall's Pat. Compound Lever Cutting Nippers, No. 2, 5 in. \$13.50; No. 4, 7 in. \$21.dis 25 1/2 Gas Pliers.dis 50 1/2 PLUMBS AND LEVELS. Disston's.dis 40 1/2 Stanley R. & L. Co.'s Pat. Adjustable.dis 65 1/2 Stanley R. & L. Co.'s Non-Adjustable.dis 65 1/2 Chapin's Patent Adjustable.dis 65 1/2 Chapin's Non-adjustable.dis 65 1/2 Standard Rule Co.'s New Adjustable.dis 65 1/2 Standard Rule Co.'s Non-Adjustable.dis 65 1/2 Pocket Levels.dis 65 1/2 RAIL. Sliding Door, Wrought Wrt. Iron.dis 30 1/2 Sliding Door, Bronzed Wrt. Iron.dis 35 1/2 Sliding Door, Iron, Painted.dis 10 1/2 Barn Door.dis 10 1/2 Per 100 feet.dis 10 1/2 B. D. for N. E. Hangers.dis 10 1/2 Per 100 feet.dis 10 1/2 RIVETS. Iron and Tinned, new list, Dec. 10, 1881.dis 40 1/2 In bulk, new list, Dec. 10, 1881.dis 40 1/2 Copper Rivets and Burrs.dis 45 1/2 No. 7, 8, 9, 10, 11, 12, 13, 14, 15.dis 40 1/2 Rivet Sets.dis 40 1/2 RODS. Stair, Brass.dis 25 1/2 Stair, Black Walnut.dis 25 1/2 RULES. Chapin's.dis 75 1/2 Standard.dis 40 1/2 Stanley.dis 40 1/2 Stevens & Co.dis 50 1/2 Stevens & Co. Miscellaneous.dis 50 1/2 SAD IRONS. Self-Heating, Charcoal.dis 9.00 net Mrs. Pott's Irons.dis 35 1/2 Enterprise Star Irons, new list, July 20, '82.dis 35 1/2 Comb'd Fluter and Sad Iron.dis 15 1/2 Common Sad Irons.dis 2 1/2 c SAND PAPER. Baeder & Adamson's Flint, 0000 1/2.dis 35 1/2 Baeder & Adamson's Flint, 2, 2 1/2, 3.dis 35 1/2 Baeder & Adamson's Flint, Assort'd 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15.dis 35 1/2 Baeder & Adamson's Star.dis 35 1/2 Baeder & Adamson's Emery r'm \$6.50 to 11.50.dis 30 1/2 J. Bartle's Sand, Flint and Emery Paper.dis 30 1/2 SASH CORD. Common.dis 14c net Patent.dis 17c net Silver Braided Lake Hemp.dis 50c net Silver Braid, Lake White Cotton.dis 50c net Silver Braided Lake Drab Cotton.dis 50c net Silver Lake Cable Laid, Bengall Unbleached Hemp, 17 cts.dis 10 1/2 Russian Hemp, 19 cts.dis 10 1/2 Italian Hemp, 34 cts.dis 10 1/2 SASH WEIGHTS. Solid Eyes, in 500-lb. lots and over.dis 1 1/2 c net SAUSAGE STUFFERS OR FILLERS. Miles.dis 20 1/2 Perry.dis 20 1/2		Enterprise Mfg. Co.dis 25 1/2 Monarch.dis 40 1/2 SAWS. Boynton's Lightning Cross Cuts, new list.dis 40 1/2 Boynton's Circular and Mill.dis 40 1/2 Boynton's Ice.dis 25 1/2 Boynton's Lightning Hand, Panel and Rip.dis 25 1/2 Disston's Circular.dis 40 1/2 Disston's Cross Cut.dis 40 1/2 Disston's Hand, Panel, Rip. &c.dis 40 1/2 Hubbard, Bakewell & Co. Circular Saws.dis 40 1/2 Hubbard, Bakewell & Co. Cross Cut.dis 40 1/2 Hubbard, Bakewell & Co. One-Man's, X Cut.dis 40 1/2 Hubbard, Bakewell & Co. Mill Saws.dis 40 1/2 Peace Circular and Mill.dis 40 1/2 Peace Hand, Panel and Rip.dis 25 1/2 Peace Cross Cuts.dis 35 1/2 Peace Hand Saws, all widths.dis 35 1/2 Webster Cross Cut, with handles.dis 25 1/2 Griffin's Hack Saws and Blades.dis 30 1/2 SAW FRAMES. White.dis 10 1/2 Saw Rods.dis 10 1/2 SAW SETS. Stillman's Genuine.dis 30 1/2 Stillman's Imitation.dis 30 1/2 Common Lever.dis 20 1/2 Leach's.dis 15 1/2 Hammer, Hotchkiss.dis 15 1/2 Aiken's Genuine.dis 30 1/2 Aiken's Imitation.dis 30 1/2 Disston's.dis 20 1/2 Morrill's.dis 35 1/2 SCALERS. Hatch, Counter, No. 171.dis 37 1/2 Hatch, Tea, No. 161.dis 37 1/2 Union Platform, Keystone.dis 45 1/2 Chicago Scale Co.dis 45 1/2 Forsyth Scale Co.dis 45 1/2 Howe's.dis 40 1/2 Chatillon's Grocers.dis 40 1/2 Chatillon's Eureka.dis 25 1/2 Family Universal.dis 50 1/2 Family Favorite.dis 30 1/2 Family Turnbull's.dis 30 1/2 Scale Beams, List of Jan. 1, 1882.dis 50 1/2 SCRAPER. Adjust. Box Scraper (S. R. & L. Co.) \$6.50, dis 20 1/2 Box, 1 Handle.dis 10 1/2 Box, 2 Handle.dis 10 1/2 Foot.dis 45 1/2 Ship, common.dis 33 1/2 Wilson Mfg. Co.dis 10 1/2 SCREW DRIVERS. Douglas Mfg. Co.dis 20 1/2 Disston's.dis 40 1/2 Cowles Mfg. Co.dis 40 1/2 Stanley Rule & Level Co.'s Var. Hds.dis 40 1/2 Stanley Rule & Level Co.'s Black Hds.dis 40 1/2 Ratchet.dis 33 1/2 Clark's Patent.dis 25 1/2 Shephardson.dis 25 1/2 SCREWS. Flat Head Iron, list Dec. 27, '82.dis 70 1/2 Round Head Iron.dis 50 1/2 Flat Head Brass.dis 60 1/2 Round Head Brass.dis 15 1/2 Flat Head Blue, add 2 1/2 c to net of invoice. Brass and Silver Capped.dis 40 1/2 Japanned, list of Plain Screws.dis 20 1/2 Coach, Patent Gimlet Point.dis 60 1/2 Coach, Common or Lag.dis 60 1/2 Bed.dis 10 1/2 Machine, Flat Head, Iron.dis 55 1/2 Machine, Round Head, Iron.dis 50 1/2 Bench, Iron.dis 50 1/2 Bench, Wood, Beach.dis 30 1/2 Bench, Wood, Hickory.dis 20 1/2 Hand, Wood.dis 20 1/2 Hand Rail, Sargent's.dis 60 1/2 Hand Rail, Humason, Beckley & Co.'s.dis 40 1/2 Hand Rail, Am. Screw Co., list Jan. 1, '81.dis 70 1/2 Jack (Wilson's).dis 25 1/2 SCREEN FRAMES AND FIXTURES. Standard Window Screens No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.dis 25 1/2 Door.dis 40 1/2 Window Corner Irons, No. 3, 4, 5, 6, 7, 8, 9, 10.dis 25 1/2 Door.dis 40 1/2 Door Latches, per dozen, \$3.60.dis 50 1/2 Porter's Patent Window and Door Screen Frames. In White.dis 33 1/2 In Black.dis 33 1/2 No. 20.dis 75 1/2 No. 21.dis 2.25 No. 22.dis 5.50 No. 23.dis 6.00 No. 30.dis 9.00 Porter's Corners— No. 0. Corners and Sticks complete for a three-foot window, per doz sets.dis 40 1/2 No. 1. Set for Window, per doz sets, Bronzed.dis 40 1/2 No. 1 1/2.dis 40 1/2 No. 4.dis 40 1/2 No. 5 1/2.dis 40 1/2 No. 6 1/2.dis 40 1/2 No. 7 1/2.dis 40 1/2 No. 8 1/2.dis 40 1/2 No. 9 1/2.dis 40 1/2 No. 10 1/2.dis 40 1/2 No. 11 1/2.dis 40 1/2 No. 12 1/2.dis 40 1/2 No. 13 1/2.dis 40 1/2 No. 14 1/2.dis 40 1/2 No. 15 1/2.dis 40 1/2 No. 16 1/2.dis 40 1/2 No. 17 1/2.dis 40 1/2 No. 18 1/2.dis 40 1/2 No. 19 1/2.dis 40 1/2 No. 20 1/2.dis 40 1/2 No. 21 1/2.dis 40 1/2 No. 22 1/2.dis 40 1/2 No. 23 1/2.dis 40 1/2 No. 24 1/2.dis 40 1/2 No. 25 1/2.dis 40 1/2 No. 26 1/2.dis 40 1/2 No. 27 1/2.dis 40 1/2 No. 28 1/2.dis 40 1/2 No. 29 1/2.dis 40 1/2 No. 30 1/2.dis 40 1/2 No. 31 1/2.dis 40 1/2 No. 32 1/2.dis 40 1/2 No. 33 1/2.dis 40 1/2 No. 34 1/2.dis 40 1/2 No. 35 1/2.dis 40 1/2 No. 36 1/2.dis 40 1/2 No. 37 1/2.dis 40 1/2 No. 38 1/2.dis 40 1/2 No. 39 1/2.dis 40 1/2 No. 40 1/2.dis 40 1/2 No. 41 1/2.dis 40 1/2 No. 42 1/2.dis 40 1/2 No. 43 1/2.dis 40 1/2 No. 44 1/2.dis 40 1/2 No. 45 1/2.dis 40 1/2 No. 46 1/2.dis 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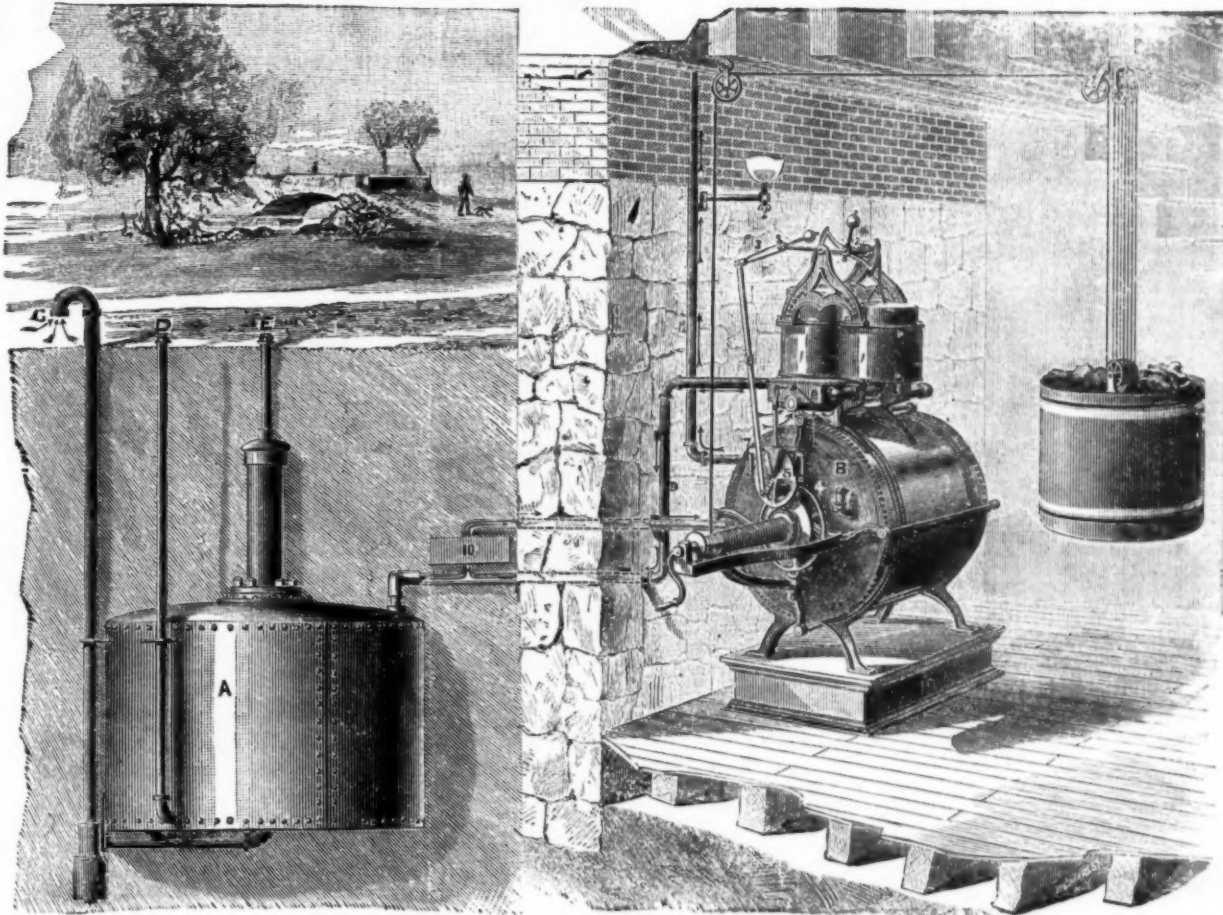
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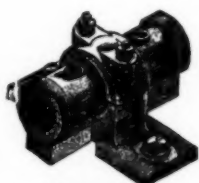
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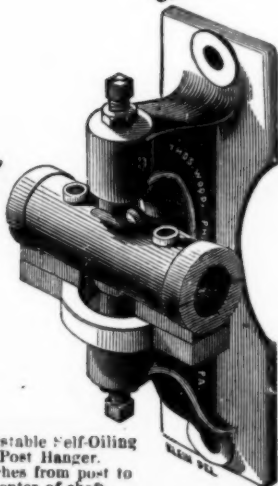
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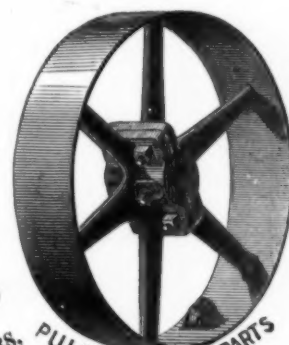
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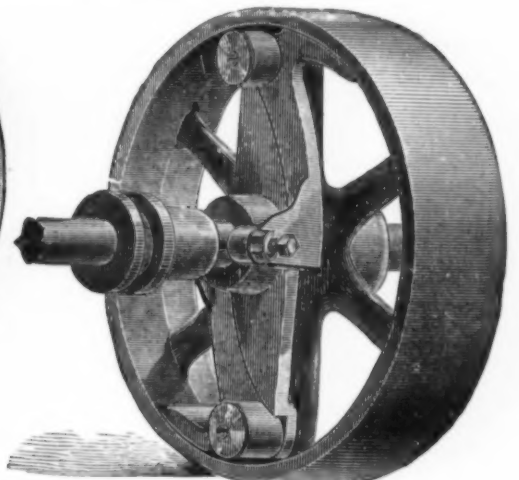
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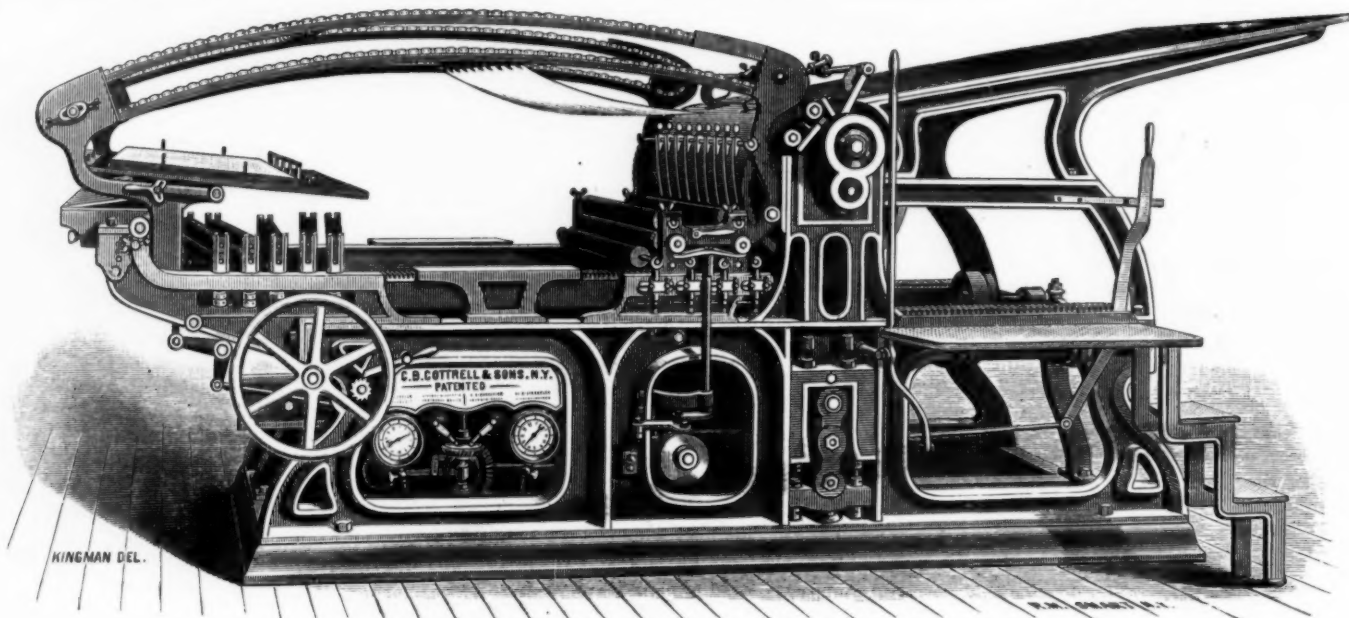
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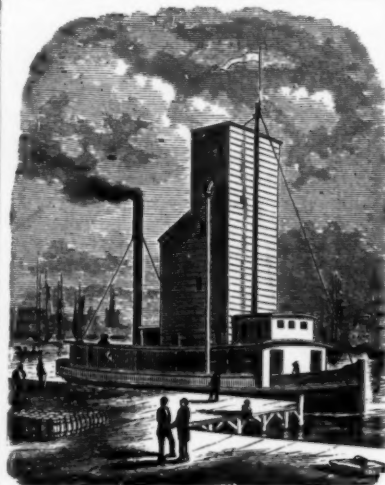
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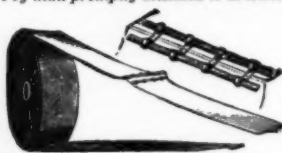
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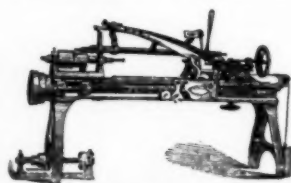
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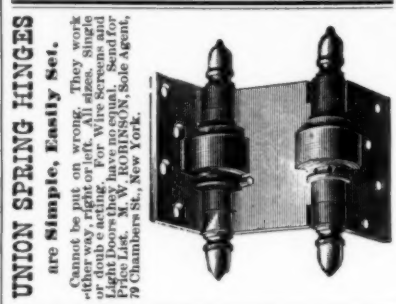
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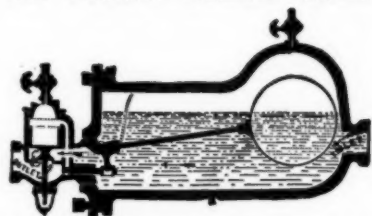
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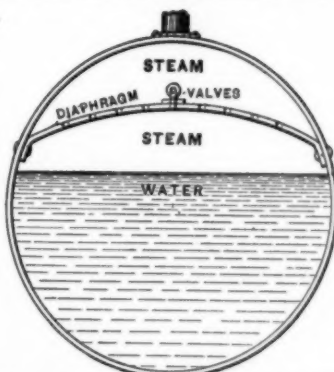
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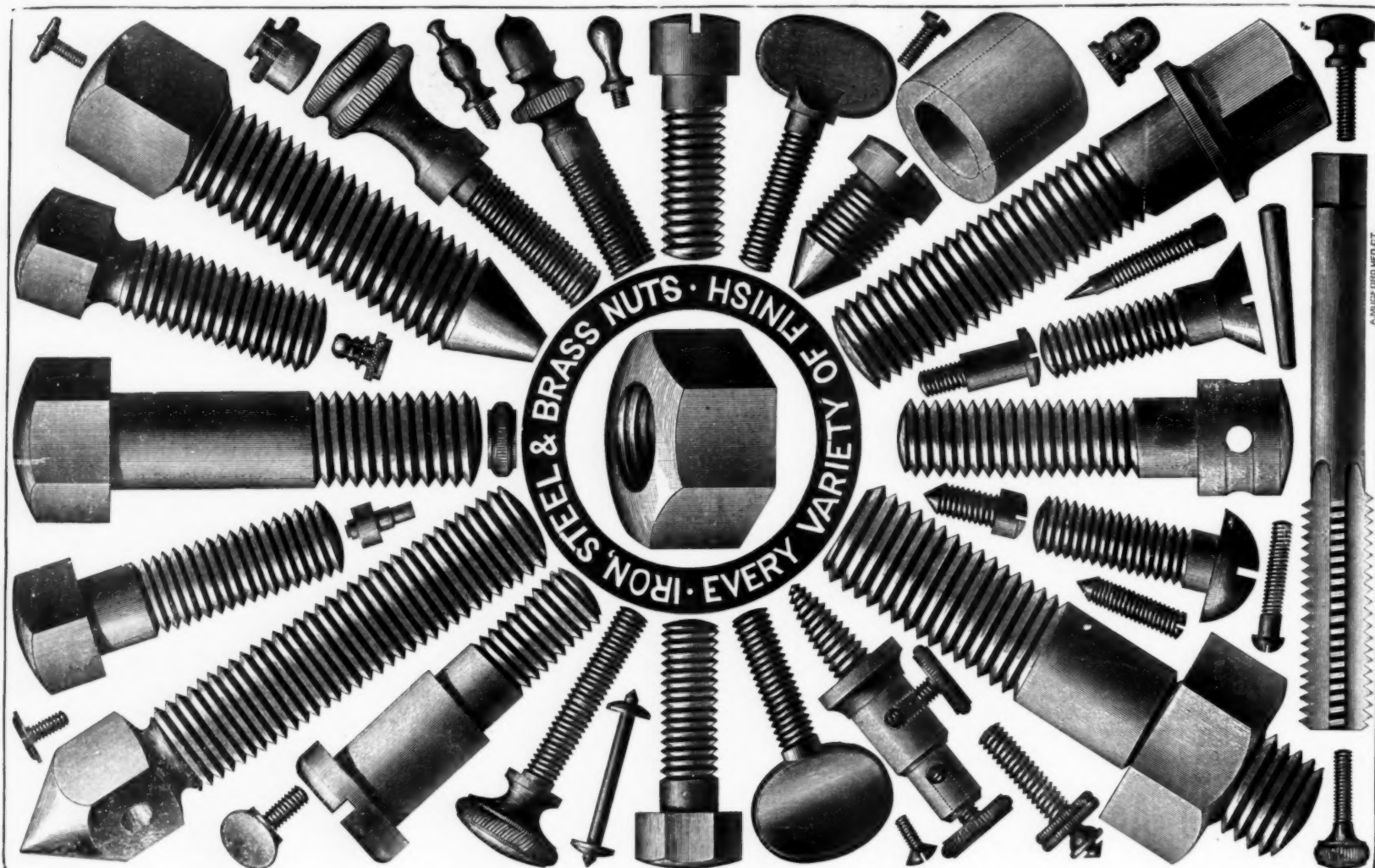
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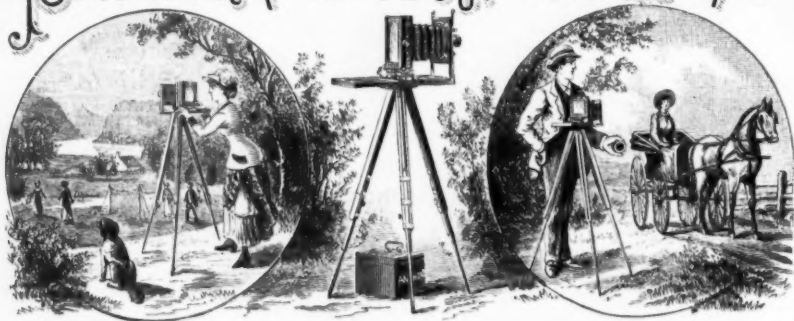
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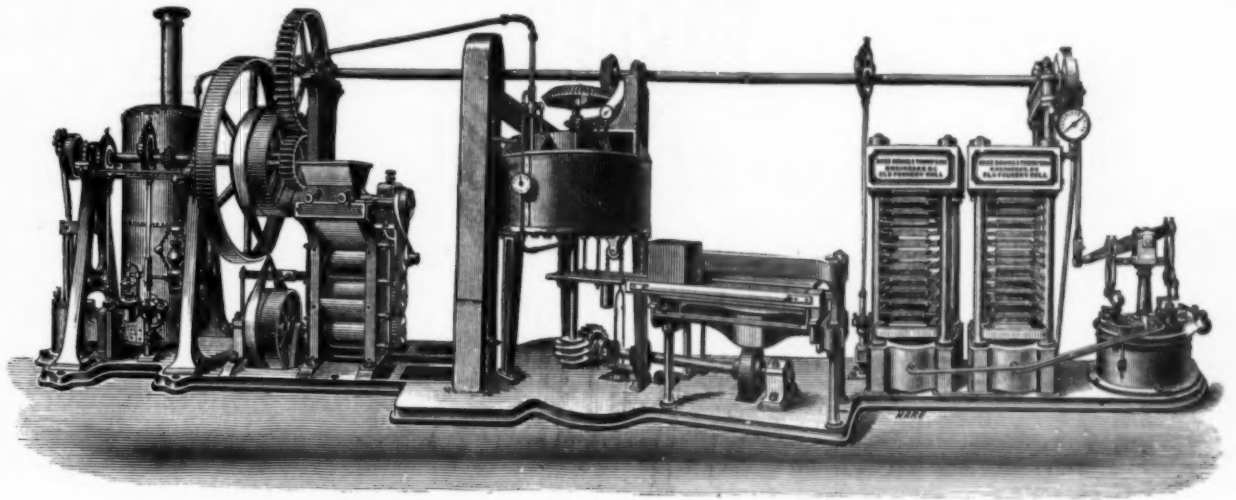
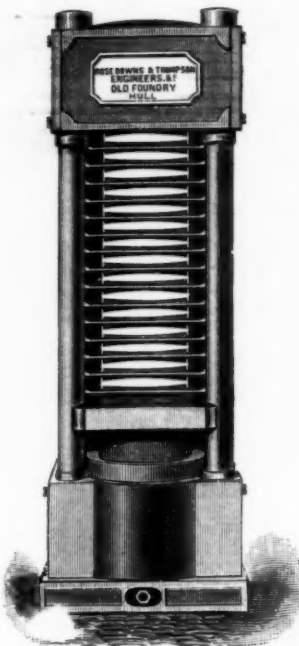
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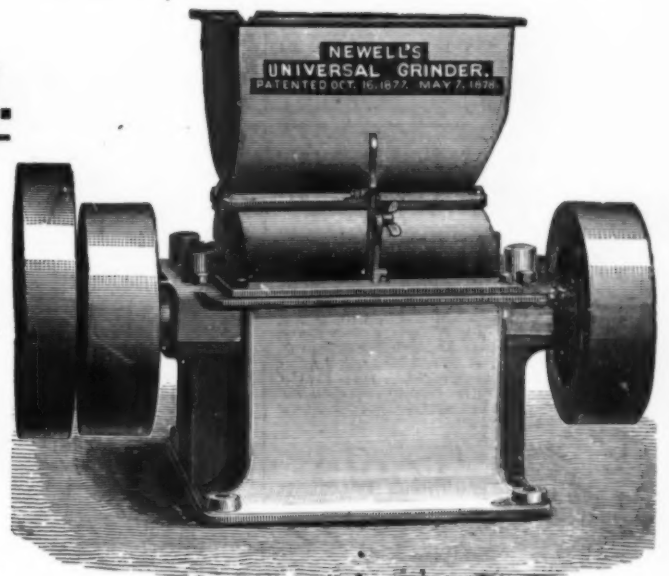
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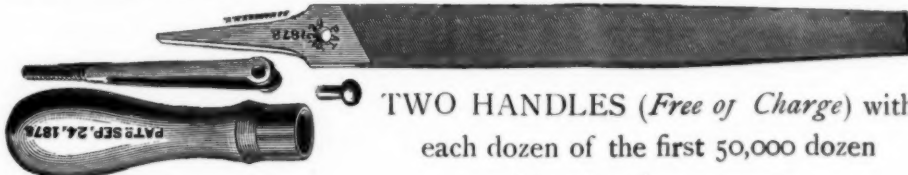
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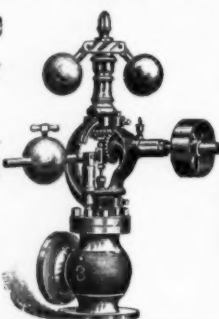
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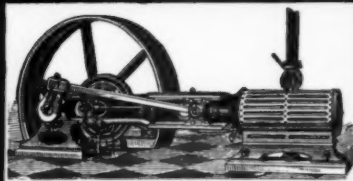
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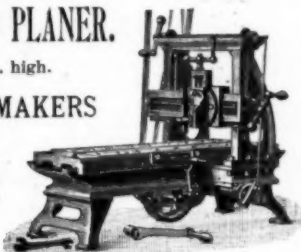
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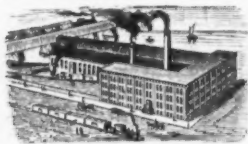
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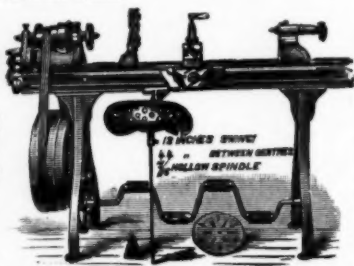
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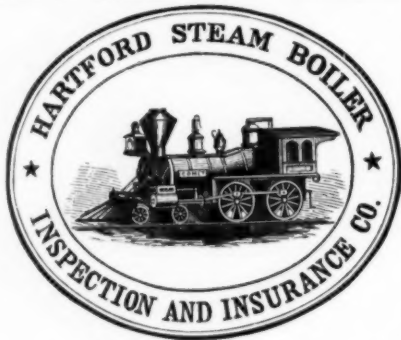
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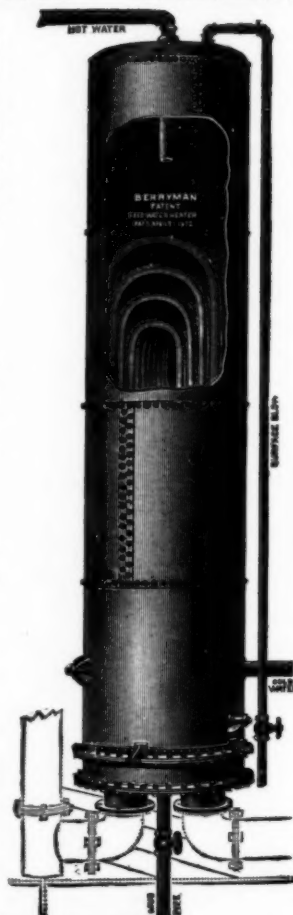
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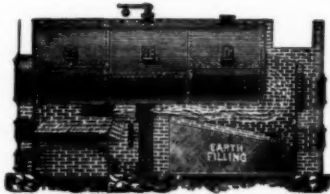
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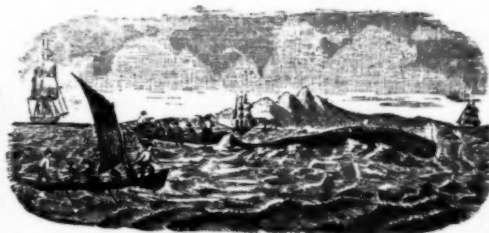
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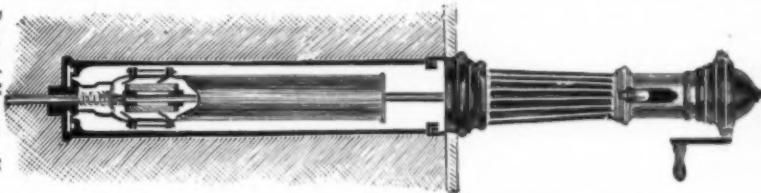
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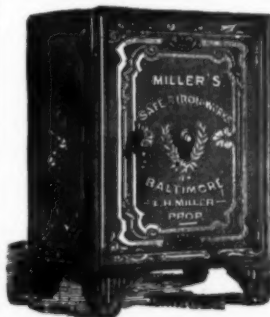
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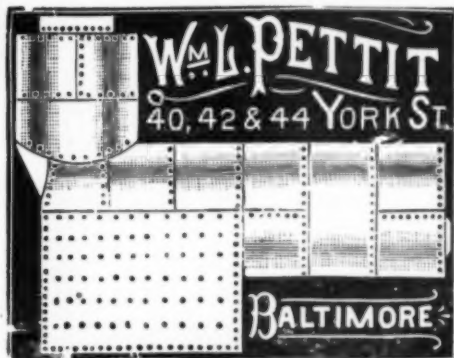
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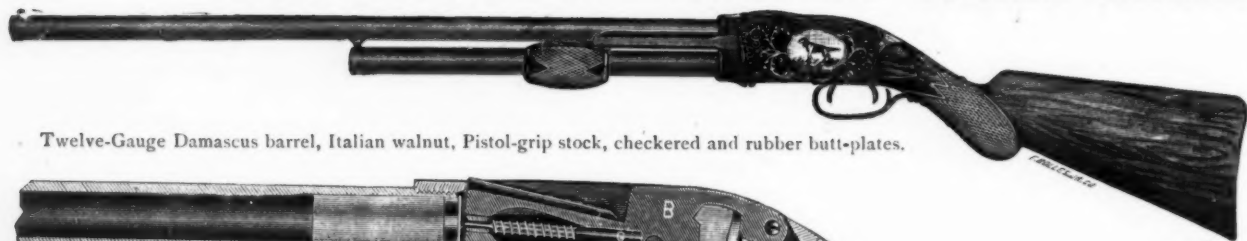
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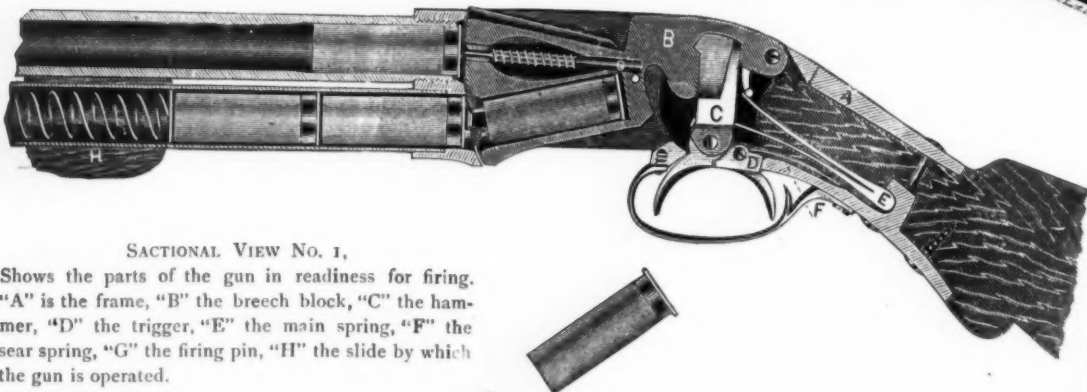
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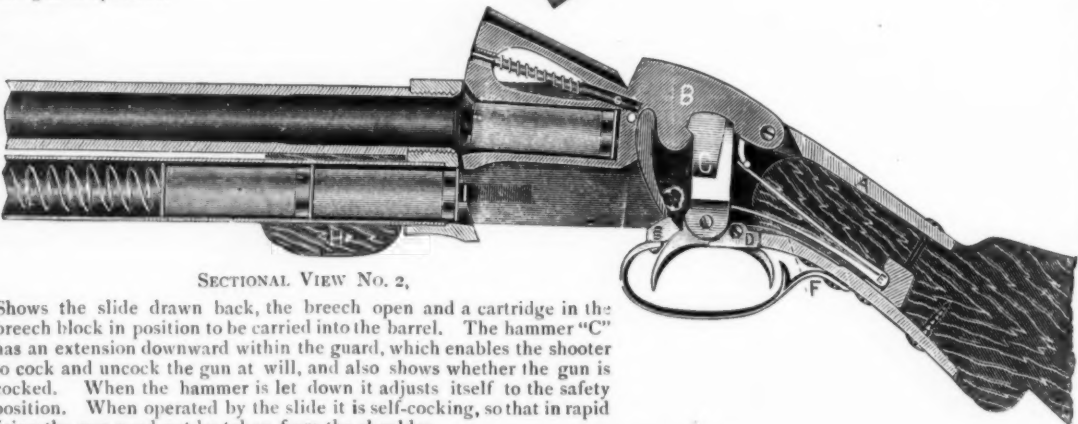


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SECTIONAL VIEW No. 1.

Shows the parts of the gun in readiness for firing. "A" is the frame, "B" the breech block, "C" the hammer, "D" the trigger, "E" the main spring, "F" the sear spring, "G" the firing pin, "H" the slide by which the gun is operated.



SECTIONAL VIEW No. 2.

Shows the slide drawn back, the breech open and a cartridge in the breech block in position to be carried into the barrel. The hammer "C" has an extension downward within the guard, which enables the shooter to cock and uncock the gun at will, and also shows whether the gun is cocked. When the hammer is let down it adjusts itself to the safety position. When operated by the slide it is self-cocking, so that in rapid firing the gun need not be taken from the shoulder.

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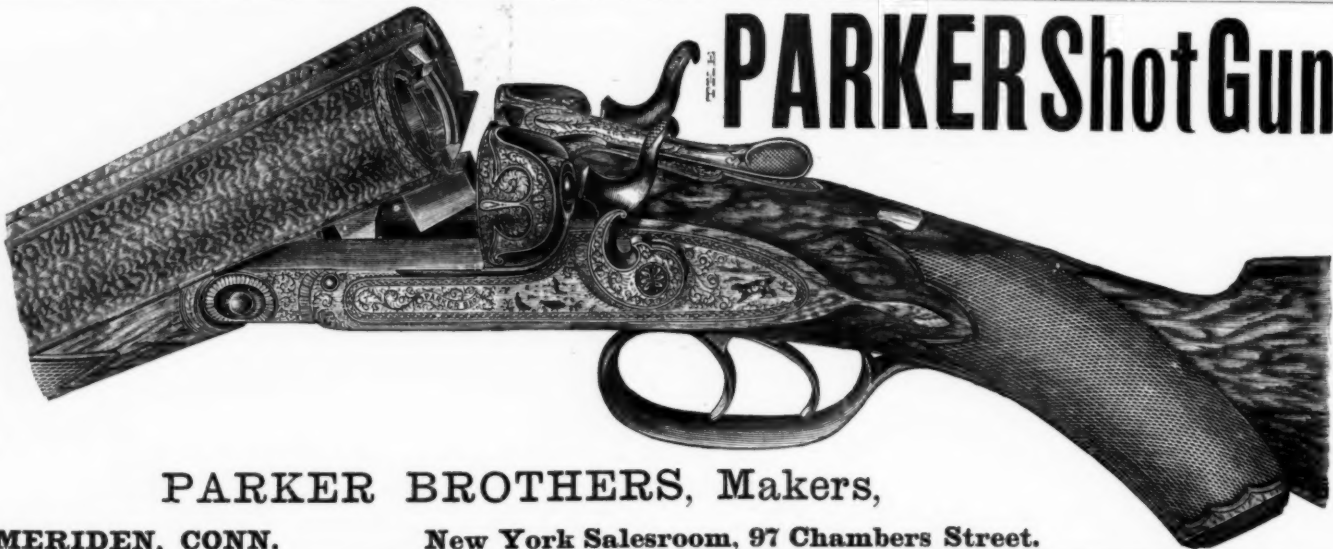
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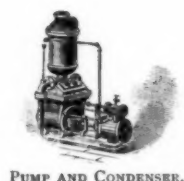
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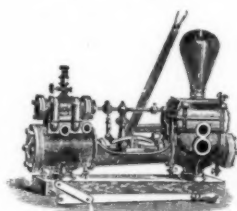
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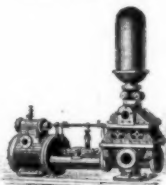
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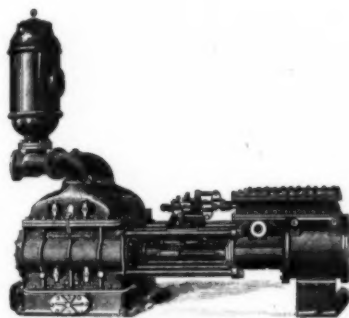


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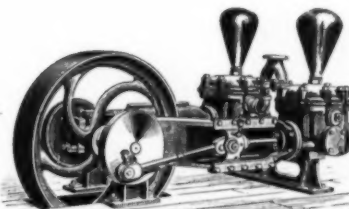


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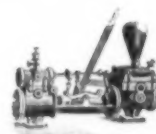
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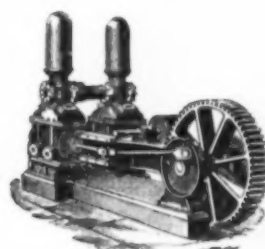
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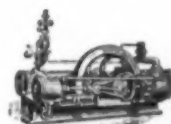
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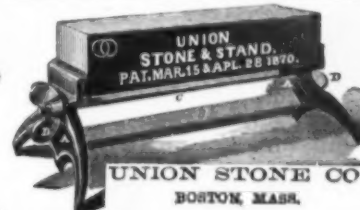
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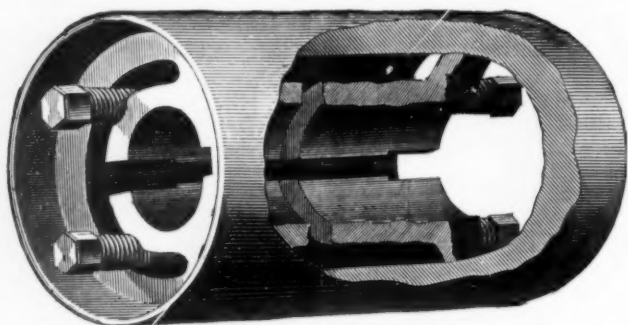
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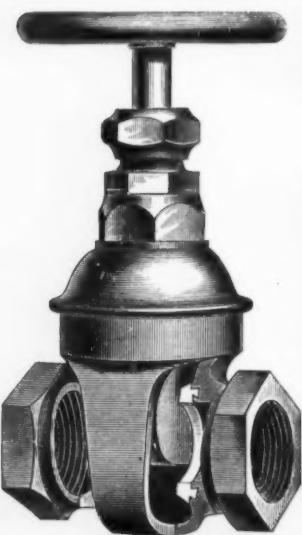
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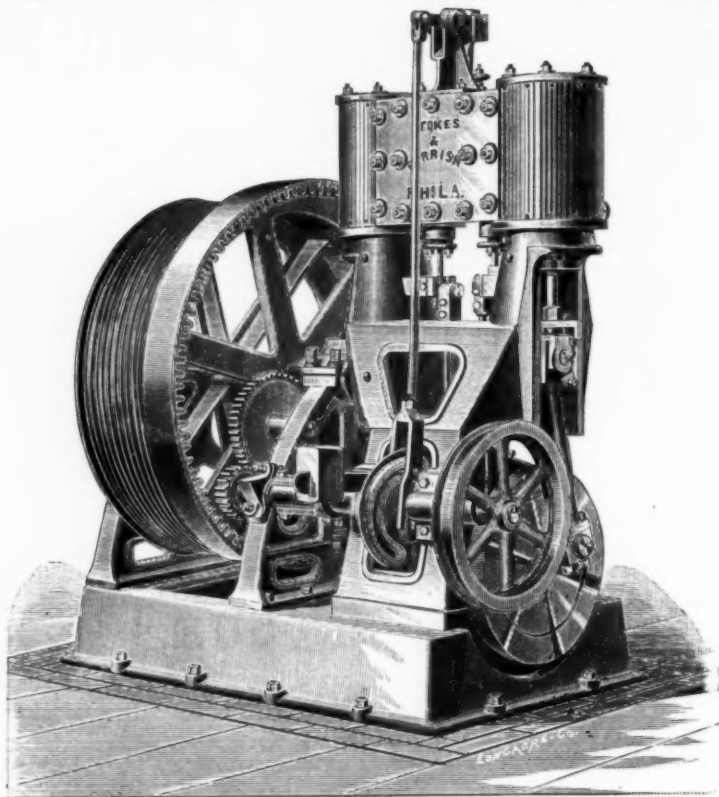
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